

HELP
YOURSELF
Series

more ARITHMETIC

Supplementary
WORKBOOK
for Home
and
School
with
Perforated
Pages

MORE ARITHMETIC
teaches
multiplication
division,
borrowing,
carrying, etc.

Whitman



NAME

Naretto R. B. Jr.

Suggestions for Using

More Arithmetic

Arithmetic can be a happy experience when it is related to a child's interests and when new learnings are presented slowly and with much concrete and visual help.

This book begins with a review of number facts and meanings taught in the two preceding Help Yourself arithmetic books—COUNT, COLOR, PLAY and BEGINNING ARITHMETIC. It then goes on to teach the remaining addition and subtraction facts, multiplication through five, division, borrowing, carrying, simple fractions, telling time, measuring, etc. All of these are presented in easy stages with meaningful illustrations and opportunities for the child to practice and review what he has learned.

MORE ARITHMETIC can be used by the child with very little help from teacher or parent if the pages are followed in sequence. The controlled vocabulary makes story problems and other reading matter easy for the child who is ready for the arithmetic experiences in this book. Answers are given for many problems, but the child is taught to prove his answers wherever possible, thus making him more independent in his work habits.

Because children vary greatly in experience and ability, this book is purposely ungraded. The age of the child is not as important as his previous arithmetic knowledge and success.

Other Help Yourself educational materials are available and descriptions can be found on the inside and outside of the back cover of this book.

Write the missing numbers.

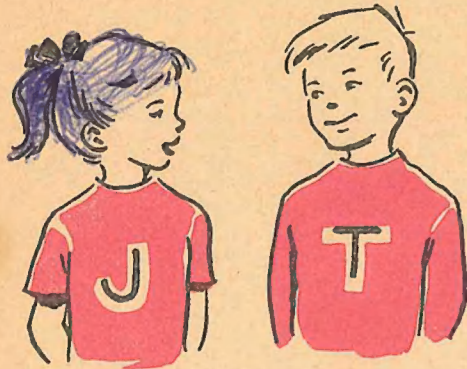
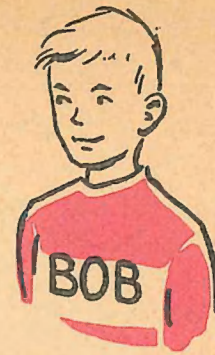
1	2	<u>3</u>	4	5	<u>6</u>	7	8
9	10	11	12	<u>13</u>	14	15	<u>16</u>
17	<u>18</u>	19	20	21	<u>22</u>	23	24
<u>25</u>	26	27	28	<u>29</u>	30	<u>31</u>	32
33	<u>34</u>	35	36	37	<u>38</u>	39	40
41	42	<u>43</u>	44	45	46	47	<u>48</u>
49	<u>50</u>	51	52	<u>53</u>	54	55	56
<u>57</u>	58	59	<u>60</u>	61	62	<u>63</u>	64
65	66	<u>67</u>	68	69	<u>70</u>	71	72
73	<u>74</u>	75	76	<u>77</u>	78	79	80
<u>81</u>	82	83	<u>84</u>	85	86	87	<u>88</u>
89	90	91	92	93	<u>94</u>	95	96
97	<u>98</u>	99	<u>100</u>	101	102	103	104
105	106	<u>107</u>	108	109	<u>110</u>	111	112
113	<u>114</u>	115	<u>116</u>	117	118	119	<u>120</u>
<u>121</u>	122	123	124	<u>125</u>	126	127	128

Name

NANETTA

How far can you write numbers? Start with 51 and go down.

Look at these two boys.
Jim is on your left.
Bob is on your right.



Here are Jan and Tony.
Who is on the left? _____

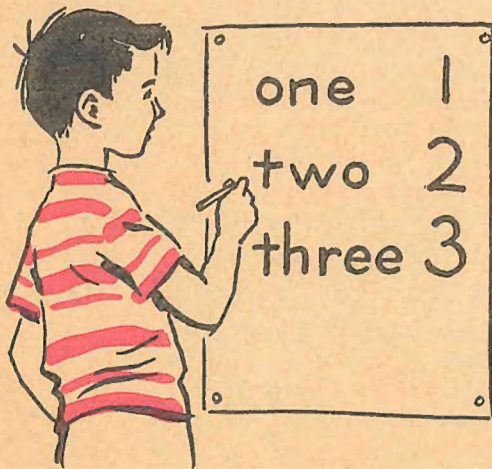
Who is on the right? _____

Here are a cat and a dog.
Which is on the right? _____



Which is on the left? _____

Tony can read number words. Can you? Look at Tony's paper. The word is on the left. The number is on the right. Put the correct number on the right of each number word.



one _____

two _____

three _____

four _____

five _____

six _____

seven _____

eight _____

nine _____

ten _____

These are mixed up. Write the number for each.

seven _____ ten _____ five _____ eight _____ one _____

two _____ four _____ six _____ three _____ nine _____

Do you know what subtraction means? It means to take something away. When we subtract we have less, or fewer, than we had before. Here are some easy subtraction problems for you to do.

$$\begin{array}{r} 6 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -2 \\ \hline \end{array}$$

Look at page 95. How many of your answers are correct? _____

Jan can write numbers from 5 to 1. Can you? Start with 5. Go to the right.

Tony can write from 10 to 1. Can you? Start with 10.



What do you know about money?

A penny is _____ cent.

Two nickels are _____ cents.

A nickel is _____ cents.

Three nickels are _____ cents.

A dime is _____ cents.

A quarter is _____ cents.

Two dimes are _____ cents.

A dollar is _____ cents.

Jan can count and write numbers by 5's. Can you?

5, 10, 15



Tony knows the answers to these problems. Do you?

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

Look at page 44. How many of your answers are correct? _____

Which problems do you need to study? Write them here.

Can you count and write numbers by 10's to 100?

6 7 8 9 10
1 2 3 4 5

10, 20



Here are three cars.
Put X on the second car.
Write 3 on the third car.

See how fast you can write the answers to these addition problems.

$$\begin{array}{r} 2 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$$

Look at page 44. How many of your answers are correct? _____
Which problems do you need to study? Write them here.

Do you know the answers to these subtraction problems?

$$\begin{array}{r} 9 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -7 \\ \hline \end{array}$$

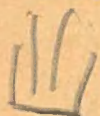
$$\begin{array}{r} 8 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -3 \\ \hline \end{array}$$



$$\begin{array}{r} 7 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -3 \\ \hline \end{array}$$

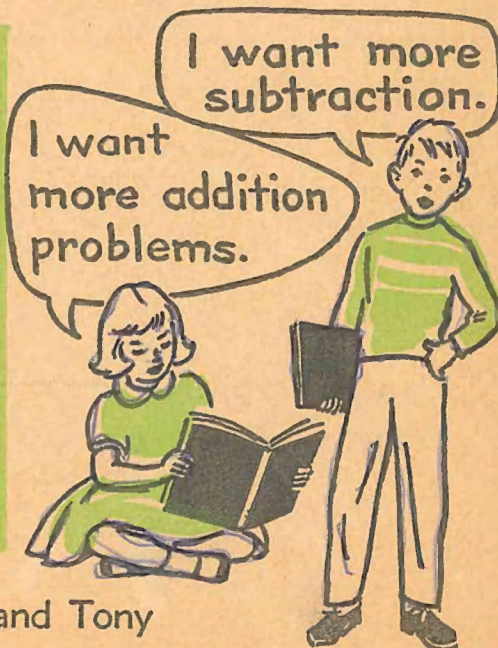
$$\begin{array}{r} 7 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ -4 \\ \hline \end{array}$$

Look at page 95. How many of your answers are correct? _____

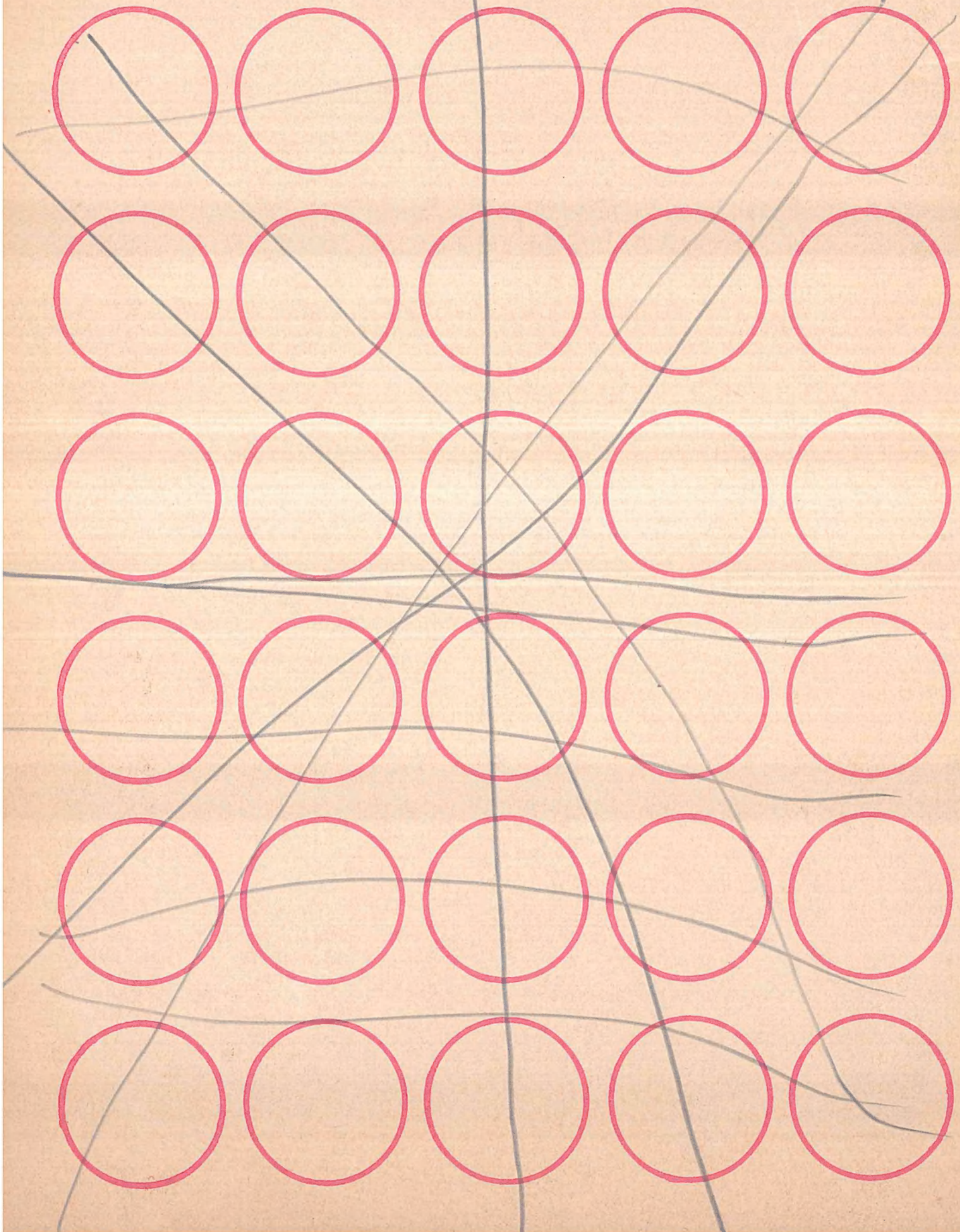
Which problems do you need to study? Write them here.



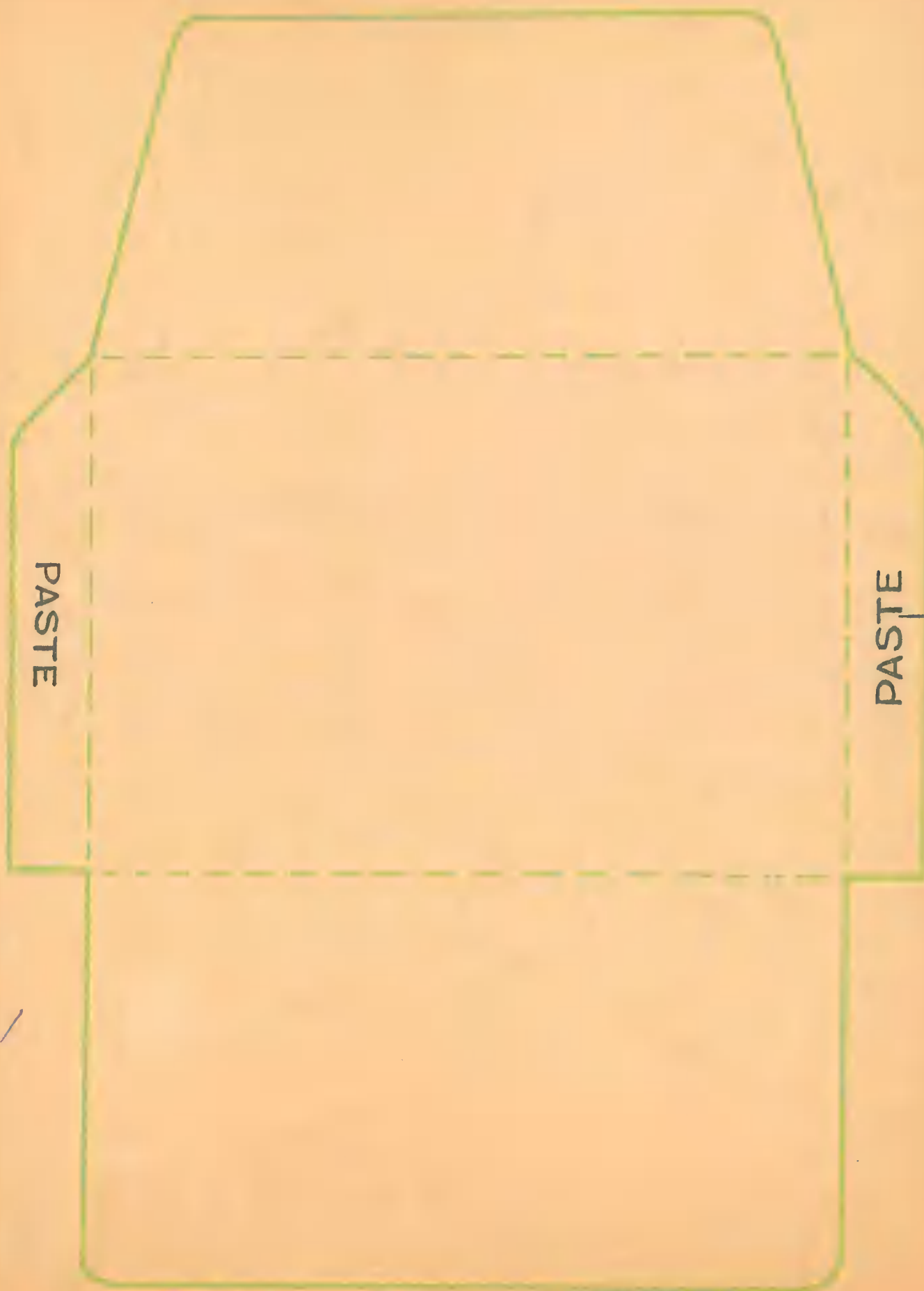
When you know all of the things Jan and Tony know, you are ready to go on to new things in arithmetic.

HELP YOURSELF WITH NEW THINGS

It is easier to understand something when we can see it. Cut out the circles. Use them for counters to figure out things in arithmetic.



Make an envelope for your counters. Cut on the solid lines. Fold on the dotted lines. Paste the flaps.



Name _____

Grade _____

School _____

WHAT DO YOU KNOW ABOUT 11?

Take 11 counters from your envelope. Use them to prove these answers.

$$\begin{array}{r} 8 \\ +3 \\ \hline 11 \end{array}$$

$8 + 3 = 11$

and

$$\begin{array}{r} 3 \\ +8 \\ \hline 11 \end{array}$$

$3 + 8 = 11$

and

$$\begin{array}{r} 7 \\ +4 \\ \hline 11 \end{array}$$

$7 + 4 = 11$

and

$$\begin{array}{r} 4 \\ +7 \\ \hline 11 \end{array}$$

$4 + 7 = 11$

and

$$\begin{array}{r} 9 \\ +2 \\ \hline 11 \end{array}$$

$9 + 2 = 11$

and

$$\begin{array}{r} 2 \\ +9 \\ \hline 11 \end{array}$$

$2 + 9 = 11$

and

$$\begin{array}{r} 6 \\ +5 \\ \hline 11 \end{array}$$

$6 + 5 = 11$

and

$$\begin{array}{r} 5 \\ +6 \\ \hline 11 \end{array}$$

$5 + 6 = 11$

and

Add these problems.

Circle those with 11 for the answer. This is a circle.

$$\begin{array}{r} 8 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +10 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +3 \\ \hline \end{array}$$

Take something away from 11.

• • • • • • • • • • / 11 - 1 =

• • • • • • • • • // 11 - 2 =

• • • • • • • • // / 11 - 3 =

• • • • • • • // / / 11 - 4 =

• • • • • • // / / / 11 - 5 =

• • • • • // / / / / 11 - 6 =

• • • • // / / / / / 11 - 7 =

• • • // / / / / / / 11 - 8 =

• • // / / / / / / / 11 - 9 =

• // / / / / / / / / 11 - 10 =

How do you read this problem?

11 - 7 = 4

Do you say, "11 minus 7 leaves 4?" That is one way.

Do you say, "7 from 11 are 4?" That is another way.

Do you say, "11 take away 7 leaves 4?" That is another way.

11
- 7
—
4

Write the answers.

11
- 3
—

11
- 1
—

11
- 8
—

11
- 2
—

11
- 10
—

10
- 5
—

11
- 7
—

11
- 4
—

11
- 6
—

11
- 5
—

11
- 9
—

8
- 4
—

Do you like story problems?

11 kittens were playing.

5 kittens ran away. $\begin{array}{r} 11 \\ - 5 \\ \hline \end{array}$

How many were left?

Write the answer.

11 ducks were swimming.

4 ducks left the pond.

How many stayed?

Write the problem and answer.

WHAT DO YOU KNOW ABOUT 12?

Take 12 counters from your envelope. Use them to prove these answers.

$$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 8 \\ + 4 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 4 \\ + 8 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 5 \\ + 7 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 9 \\ + 3 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 3 \\ + 9 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 10 \\ + 2 \\ \hline 12 \end{array}$$

Study these until you know them.

Write the answers.

$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

Take something away from 12.

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 1 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 2 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 3 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 4 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 5 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 6 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 7 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 8 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 9 =$$

$$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \quad 12 - 10 =$$

Add.

It's time to review. Are you ready?

Try to do these without counters.

Subtract.

$3 + 4 =$

$5 + 6 =$

$12 - 9 =$

$9 - 9 =$

$8 + 3 =$

$7 + 3 =$

$11 - 8 =$

$11 - 3 =$

$6 + 4 =$

$2 + 9 =$

$10 - 2 =$

$12 - 6 =$

$5 + 2 =$

$6 + 3 =$

$9 - 2 =$

$10 - 8 =$

$9 + 4 =$

$2 + 4 =$

$8 - 5 =$

$11 - 1 =$

$4 + 5 =$

$7 + 5 =$

$12 - 8 =$

$10 - 1 =$

$4 + 7 =$

$2 + 8 =$

$12 - 2 =$

$9 - 7 =$

$6 + 5 =$

$6 + 2 =$

$11 - 9 =$

$12 - 4 =$

$2 + 7 =$

$7 + 4 =$

$10 - 6 =$

$11 - 7 =$

$2 + 6 =$

$3 + 8 =$

$9 - 3 =$

$10 - 5 =$

$8 + 4 =$

$2 + 5 =$

$8 - 4 =$

$9 - 5 =$

$3 + 7 =$

$10 + 2 =$

$12 - 1 =$

$10 - 4 =$

$8 + 2 =$

$4 + 6 =$

$10 - 3 =$

$9 - 6 =$

$3 + 5 =$

$5 + 3 =$

$9 - 5 =$

$12 - 12 =$

$6 + 6 =$

$5 + 4 =$

$8 - 3 =$

$10 - 7 =$

$3 + 6 =$

$7 + 2 =$

$10 - 10 =$

$11 - 5 =$

$3 + 2 =$

$5 + 7 =$

$11 - 6 =$

$12 - 7 =$

Add.

Subtract.

$$\begin{array}{r} 3 \\ + 7 \\ \hline \end{array}$$

10

$$\begin{array}{r} 9 \\ + 3 \\ \hline \end{array}$$

12

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

8

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

10

$$\begin{array}{r} 11 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$$

9

$$\begin{array}{r} 4 \\ + 7 \\ \hline \end{array}$$

11

$$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$$

12

$$\begin{array}{r} 2 \\ + 8 \\ \hline \end{array}$$

10

$$\begin{array}{r} 9 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$$

12

$$\begin{array}{r} 7 \\ + 4 \\ \hline \end{array}$$

11

$$\begin{array}{r} 8 \\ + 3 \\ \hline \end{array}$$

11

$$\begin{array}{r} 9 \\ + 2 \\ \hline \end{array}$$

11

$$\begin{array}{r} 10 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 9 \\ \hline \end{array}$$

11

$$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$$

8

$$\begin{array}{r} 5 \\ + 6 \\ \hline \end{array}$$

11

$$\begin{array}{r} 4 \\ + 8 \\ \hline \end{array}$$

12

$$\begin{array}{r} 12 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$$

9

$$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$$

12

$$\begin{array}{r} 8 \\ + 2 \\ \hline \end{array}$$

10

$$\begin{array}{r} 3 \\ + 9 \\ \hline \end{array}$$

12

$$\begin{array}{r} 10 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

10

$$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$$

9

$$\begin{array}{r} 10 \\ + 2 \\ \hline \end{array}$$

12

$$\begin{array}{r} 3 \\ + 8 \\ \hline \end{array}$$

11

$$\begin{array}{r} 12 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$$

11

$$\begin{array}{r} 2 \\ + 4 \\ \hline \end{array}$$

6

$$\begin{array}{r} 2 \\ + 7 \\ \hline \end{array}$$

9

$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

12

$$\begin{array}{r} 11 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 7 \\ \hline \end{array}$$

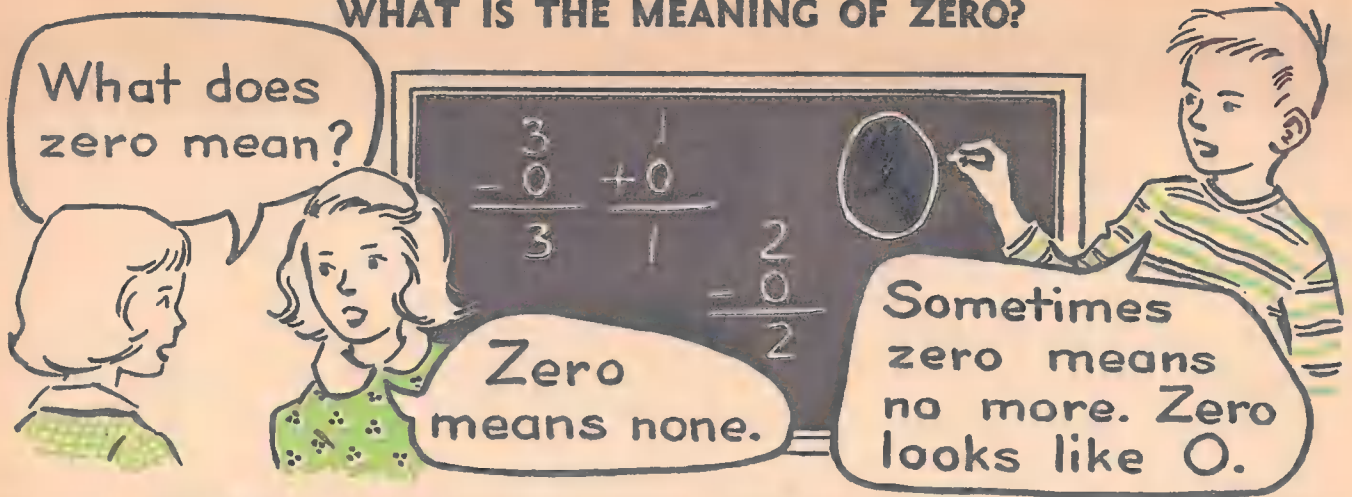
$$\begin{array}{r} 11 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 7 \\ \hline \end{array}$$

Check your answers with pages 44 and 95.

Which problems do you need to study? Write them here.

WHAT IS THE MEANING OF ZERO?



Adding zero to a number doesn't change the number.

Subtracting zero from a number doesn't change the number.

Use counters to prove the answers in the picture.

Add. Watch for the zeros.

$\begin{array}{r} 5 \\ + 0 \\ \hline 5 \end{array}$	$\begin{array}{r} 6 \\ + 6 \\ \hline 12 \end{array}$	$\begin{array}{r} 6 \\ + 5 \\ \hline 11 \end{array}$	$\begin{array}{r} 2 \\ + 0 \\ \hline 2 \end{array}$	$\begin{array}{r} 7 \\ + 4 \\ \hline 11 \end{array}$	$\begin{array}{r} 1 \\ + 0 \\ \hline 1 \end{array}$	$\begin{array}{r} 4 \\ + 8 \\ \hline 12 \end{array}$	$\begin{array}{r} 12 \\ + 0 \\ \hline 12 \end{array}$
$\begin{array}{r} 0 \\ + 8 \\ \hline 8 \end{array}$	$\begin{array}{r} 8 \\ + 4 \\ \hline 12 \end{array}$	$\begin{array}{r} 4 \\ + 7 \\ \hline 11 \end{array}$	$\begin{array}{r} 7 \\ + 0 \\ \hline 7 \end{array}$	$\begin{array}{r} 4 \\ + 0 \\ \hline 4 \end{array}$	$\begin{array}{r} 3 \\ + 9 \\ \hline 12 \end{array}$	$\begin{array}{r} 0 \\ + 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 0 \\ + 10 \\ \hline 10 \end{array}$
$\begin{array}{r} 3 \\ + 0 \\ \hline 3 \end{array}$	$\begin{array}{r} 9 \\ + 3 \\ \hline 12 \end{array}$	$\begin{array}{r} 6 \\ + 0 \\ \hline 6 \end{array}$	$\begin{array}{r} 8 \\ + 3 \\ \hline 11 \end{array}$	$\begin{array}{r} 0 \\ + 9 \\ \hline 9 \end{array}$	$\begin{array}{r} 3 \\ + 8 \\ \hline 11 \end{array}$	$\begin{array}{r} 11 \\ + 0 \\ \hline 11 \end{array}$	$\begin{array}{r} 5 \\ + 6 \\ \hline 11 \end{array}$

Subtract. Circle those with zero for the answer.

$\begin{array}{r} 9 \\ - 0 \\ \hline 9 \end{array}$	$\begin{array}{r} 3 \\ - 0 \\ \hline 3 \end{array}$	$\begin{array}{r} 3 \\ - 3 \\ \hline 0 \end{array}$	$\begin{array}{r} 0 \\ - 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 1 \\ - 0 \\ \hline 1 \end{array}$	$\begin{array}{r} 4 \\ - 4 \\ \hline 0 \end{array}$	$\begin{array}{r} 7 \\ - 0 \\ \hline 7 \end{array}$	$\begin{array}{r} 2 \\ - 0 \\ \hline 2 \end{array}$
$\begin{array}{r} 5 \\ - 5 \\ \hline 0 \end{array}$	$\begin{array}{r} 1 \\ - 1 \\ \hline 0 \end{array}$	$\begin{array}{r} 10 \\ - 0 \\ \hline 10 \end{array}$	$\begin{array}{r} 7 \\ - 7 \\ \hline 0 \end{array}$	$\begin{array}{r} 2 \\ - 2 \\ \hline 0 \end{array}$	$\begin{array}{r} 8 \\ - 0 \\ \hline 8 \end{array}$	$\begin{array}{r} 6 \\ - 6 \\ \hline 0 \end{array}$	$\begin{array}{r} 11 \\ - 0 \\ \hline 11 \end{array}$

STORY PROBLEMS WITH ADDITION

There are 5 children in the Smith family.
There are 4 children in the Jones family.
How many children in both families?
Write the answer.

One mother hen has 7 little chicks.
Another hen has 4 little chicks.
How many little chicks all together?
Write the problem and the answer.

Bill had 8 tiny cars.
He bought 4 more.
How many did he have then?
Write the problem and the answer.

There are 4 kites flying in the sky.
There are 3 kites caught in a tree.
How many kites all together?
Write the problem and the answer.

There are 7 girls in Tom's group.
There are 5 boys in his group.
How many children in Tom's group?
Write the problem and the answer.

A man walked 5 miles on Saturday.
He walked 6 miles on Sunday.
How many miles did he walk?
Write the problem and the answer.

WHAT DO YOU KNOW ABOUT 13?

Use counters to prove these answers.

$$\begin{array}{r} 6 \\ + 7 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 7 \\ + 6 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 8 \\ + 5 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 5 \\ + 8 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 9 \\ + 4 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 4 \\ + 9 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 13 \\ + 0 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 11 \\ + 2 \\ \hline 13 \end{array}$$

Study these until you know them.

Add.

Circle those with 13 for the answer.

$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 9 \\ \hline \end{array}$$

Take something away from 13.

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 1 =$$

$$\begin{array}{r} 13 \\ - 4 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 2 =$$

$$\begin{array}{r} 13 \\ - 9 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 3 =$$

$$\begin{array}{r} 13 \\ - 5 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 4 =$$

$$\begin{array}{r} 13 \\ - 7 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 5 =$$

$$\begin{array}{r} 13 \\ - 9 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 6 =$$

$$\begin{array}{r} 13 \\ - 7 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 7 =$$

$$\begin{array}{r} 13 \\ - 9 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 8 =$$

$$\begin{array}{r} 13 \\ - 7 \\ \hline \end{array}$$

$$\cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 13 - 9 =$$

STORY PROBLEMS WITH SUBTRACTION

Nan made 12 cookies.
Bob ate 3 of them.
How many cookies were left?
Write the answer.



Don had 11 marbles.
He gave away 6 of them.
How many marbles did he have then?
Write the problem and the answer.



Steve had 7 peanuts.
He ate all of them.
How many peanuts were left?
Write the problem and the answer.



Patty dropped 3 cups.
None of the cups broke.
How many cups were all right?
Write the problem and the answer.



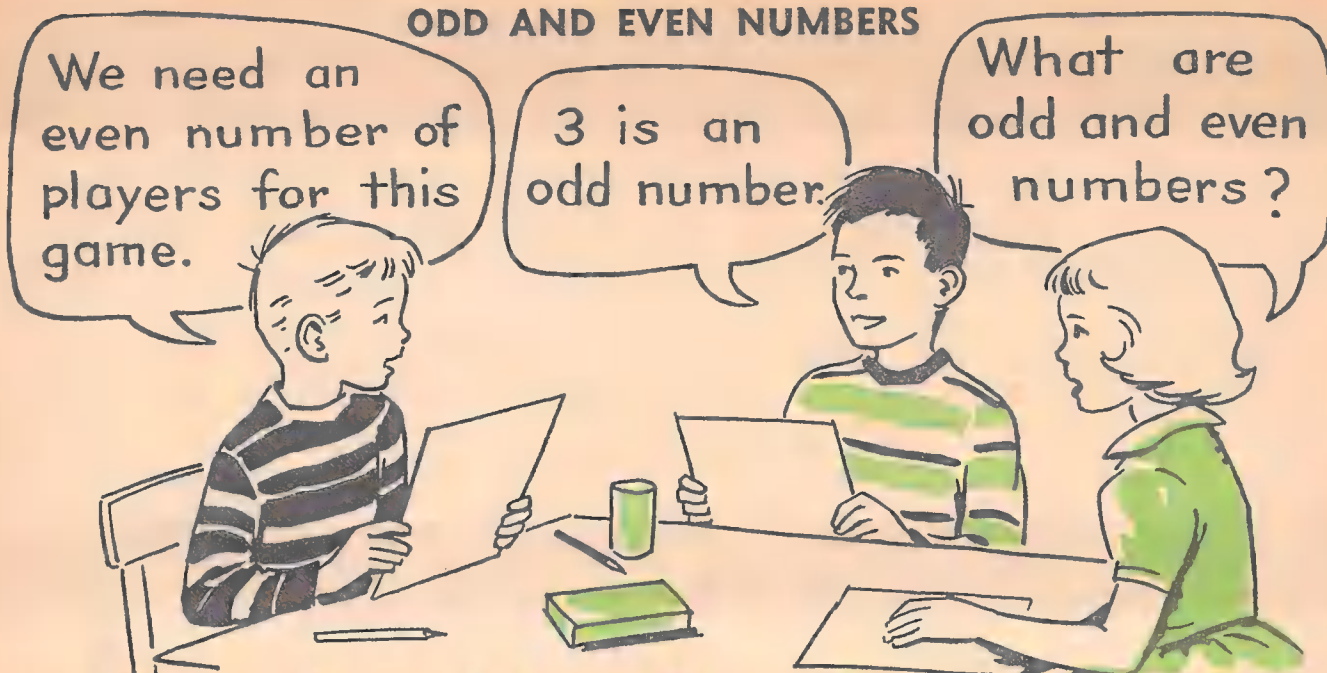
8 birds sat on a fence.
3 birds flew away.
How many birds stayed?
Write the problem and the answer.



David had 2 pencils.
He lost both of them.
How many did he have then?
Write the problem and the answer.



ODD AND EVEN NUMBERS



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

The even numbers are circled.

Write the even numbers on the lines.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

The odd numbers are circled.

Write the odd numbers on the lines.

Circle the odd numbers.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Circle the even numbers.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

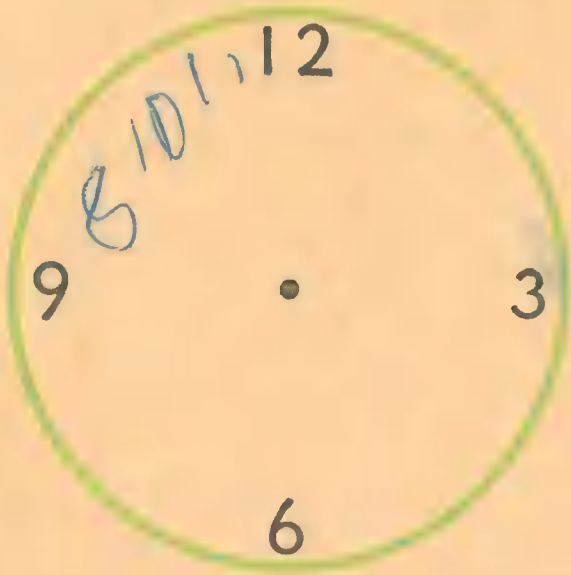
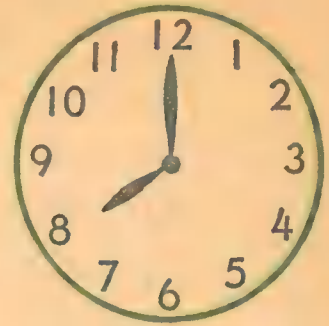
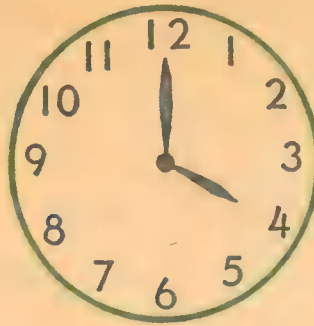
A baseball team has nine players. Is this an even number? _____

A quartet has four people. Is this an even number? _____

A pair of anything is two. Is this an even number? _____

TELLING TIME

The long hand is on 12 at the beginning of each hour. The short hand points to the hour. What time do the little clocks say?



Write the missing numbers on the big clock. Draw a long hand that points to 12. Can you draw the short hand and make this clock say 9 o'clock?

The long hand is the minute hand. It moves a tiny bit every minute. The minute hand goes all the way around the clock every hour.

The short hand is the hour hand. It moves slowly. It takes an hour for it to move from one number to the next number. It takes 12 hours for the hour hand to go all the way around the clock.

The clock hands move from left to right. Look at the arrows.



When the long hand has moved half way around, it is half past the hour. The short hand has moved half way past the number that tells the hour. It is on its way to the next hour.



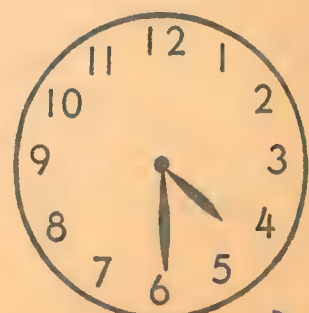
half past 1



half past 3



half past 6



half past 5

WHAT TIME IS IT?



3 o'clock



half past 6



11 o'clock



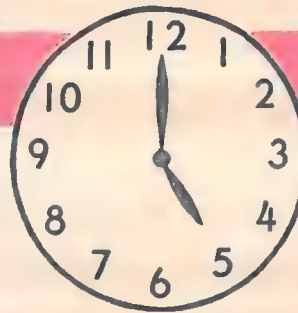
half past 11



9 o'clock



half past 6



5 o'clock



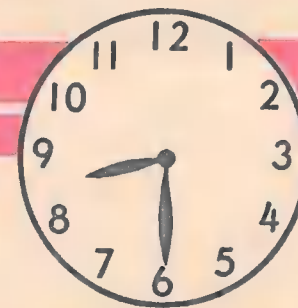
half past 6



half past 3



half past 6



half past 6



half past 6

Here is a practice page to do without counters.

Will you add? _____

Will you subtract? _____

$$\begin{array}{r} 11 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ - 4 \\ \hline \end{array}$$

Look at page 95. How many are correct? _____

Which problems do you need to study? Write them here.

STORY PROBLEMS WITH ADDITION

Mary had 4 dolls.

She got 2 more for her birthday.

How many dolls did she have then?

Write the problem and the answer.

Jerry bought 3 candy bars.

Tim bought 5 candy bars.

How many did they buy in all?

Write the problem and the answer.

There are 4 chairs in Mrs. Gray's kitchen.

There are 6 chairs in her dining room.

How many chairs in both rooms?

Write the problem and the answer.

A farmer had 6 brown cows.

He had 7 black cows.

How many cows did he have?

Write the problem and the answer.

Ted has 9 airplanes.

Joe has 3 airplanes.

How many do they have all together?

Write the problem and the answer.

Sue has 5 storybooks.

Her brother has 6.

How many do they have all together?

Write the problem and the answer.

WHAT IS MISSING?

The answers are here but something is missing in each problem. Write the missing numbers.

$$\begin{array}{r} 6 \\ + \\ \hline 12 \end{array}$$

$$\begin{array}{r} 10 \\ + \\ \hline 14 \end{array}$$

$$\begin{array}{r} 3 \\ + \\ \hline 3 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ \hline 10 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ \hline 13 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ \hline 12 \end{array}$$

$$\begin{array}{r} 5 \\ + \\ \hline 11 \end{array}$$

$$\begin{array}{r} 1 \\ + \\ \hline 1 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ \hline 7 \end{array}$$

$$\begin{array}{r} 4 \\ + \\ \hline 10 \end{array}$$

$$\begin{array}{r} 5 \\ + \\ \hline 12 \end{array}$$

$$\begin{array}{r} 10 \\ + \\ \hline 12 \end{array}$$

$$\begin{array}{r} 5 \\ + \\ \hline 13 \end{array}$$

$$\begin{array}{r} 2 \\ + \\ \hline 8 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ \hline 14 \end{array}$$

$$\begin{array}{r} 3 \\ + \\ \hline 7 \end{array}$$

$$\begin{array}{r} 9 \\ + \\ \hline 12 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ \hline 11 \end{array}$$

$$\begin{array}{r} 5 \\ + \\ \hline 14 \end{array}$$

$$\begin{array}{r} 9 \\ + \\ \hline 10 \end{array}$$

$$\begin{array}{r} 8 \\ + \\ \hline 14 \end{array}$$

$$\begin{array}{r} 8 \\ + \\ \hline 9 \end{array}$$

$$\begin{array}{r} 9 \\ + \\ \hline 14 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ \hline 8 \end{array}$$

$$\begin{array}{r} 6 \\ + \\ \hline 14 \end{array}$$

$$\begin{array}{r} 4 \\ + \\ \hline 11 \end{array}$$

$$\begin{array}{r} 10 \\ + \\ \hline 11 \end{array}$$

$$\begin{array}{r} 6 \\ + \\ \hline 11 \end{array}$$

$$\begin{array}{r} 6 \\ + \\ \hline 10 \end{array}$$

$$\begin{array}{r} 3 \\ + \\ \hline 12 \end{array}$$

$$\begin{array}{r} 8 \\ + \\ \hline 8 \end{array}$$

$$\begin{array}{r} 4 \\ + \\ \hline 7 \end{array}$$

$$\begin{array}{r} 9 \\ + \\ \hline 13 \end{array}$$

$$\begin{array}{r} 8 \\ + \\ \hline 11 \end{array}$$

$$\begin{array}{r} 5 \\ + \\ \hline 5 \end{array}$$

$$\begin{array}{r} 8 \\ + \\ \hline 12 \end{array}$$

Is 2 the missing number?



How many are correct? _____ Look at page 44.
Which problems do you need to study? Write them here.

WHAT DO YOU KNOW ABOUT 15?

Use counters to prove these answers.

$$\begin{array}{r} 12 \\ + 3 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 8 \\ + 7 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 9 \\ + 6 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 6 \\ + 9 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 10 \\ + 5 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 5 \\ + 10 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 11 \\ + 4 \\ \hline 15 \end{array}$$

Study these until you know them.

Write the answers.

Circle those with 15 for the answer.

$$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 9 \\ \hline \end{array}$$

Take something away from 15.

•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 2 =
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 3 =
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 4 =
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 5 =
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 6 =
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 7 =
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 8 =
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	15 - 9 =

Write the missing numbers.

$$\begin{array}{r} 14 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 4 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 4 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 14 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 5 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 10 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 7 \end{array}$$

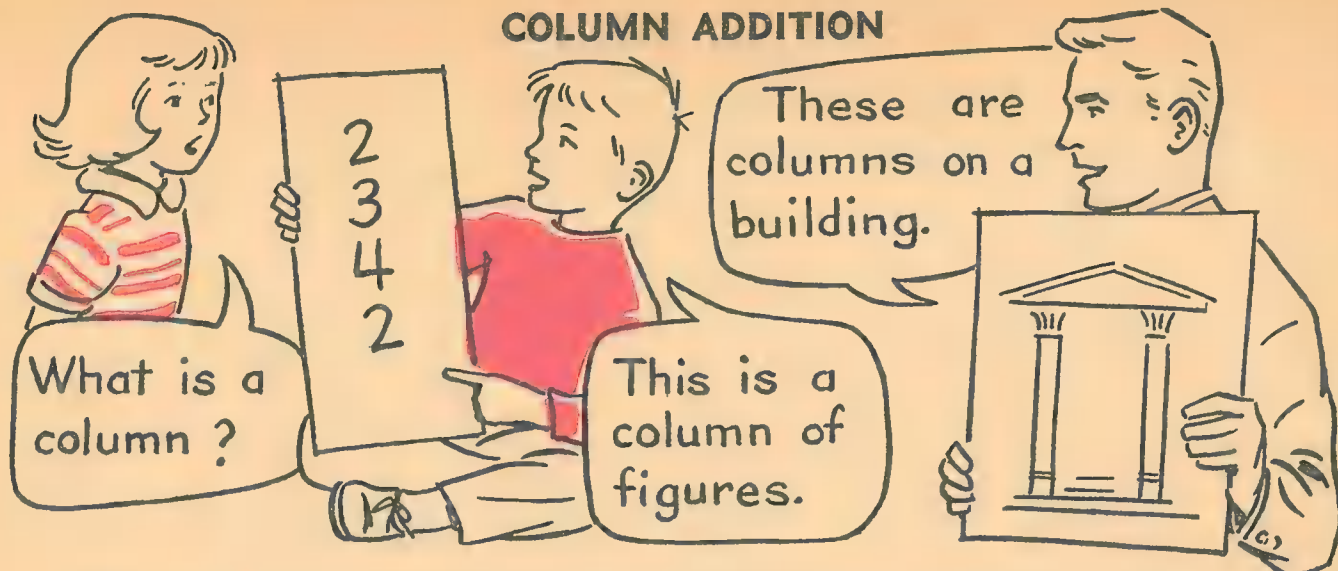
$$\begin{array}{r} 15 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 14 \\ - \\ \hline 7 \end{array}$$

Look at page 95. How many are correct? _____

COLUMN ADDITION



When we add more than two numbers we write them in a column.

We start at the top and add down.

Add the first two numbers. 2 and 3 are 5.

Add the next number to it. 5 and 4 are 9.

Add the next number. 9 and 2 are 11.

$$2 + 3 + 4 + 2 = 11$$

$$\begin{array}{r} 2 \\ 3 \\ 4 \\ + 2 \\ \hline 11 \end{array}$$

Use counters to prove this.

Put them in groups like this:



Use counters to prove these answers.

$$\begin{array}{r} 4 \\ 6 \\ + 1 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 5 \\ 3 \\ + 4 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 2 \\ 3 \\ + 5 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 7 \\ 2 \\ + 4 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 4 \\ 3 \\ + 6 \\ \hline 13 \end{array}$$

$$\begin{array}{r} 5 \\ 0 \\ + 6 \\ \hline 11 \end{array}$$

Add these columns without counters.

$$\begin{array}{r} 3 \\ 0 \\ 3 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ 1 \\ 6 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ 0 \\ 4 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ 1 \\ 2 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ 2 \\ 5 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ 4 \\ 7 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ 2 \\ 3 \\ + 2 \\ \hline \end{array}$$

Ask someone to look at the answers. How many are correct? _____

THE TABLE OF 2'S

We know these are true. Study them until you know them.

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

2×4 is
the same
as 4×2 .



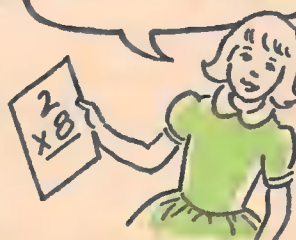
$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

2×8 is
the same
as 8×2 .



$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

Look at the answers. Is the table of 2's like counting by 2's?

1	2	3	4	5	6	7	8	9	10
$\times 2$	$\times 2$	$\times 2$	$\times 2$	$\times 2$	$\times 2$	$\times 2$	$\times 2$	$\times 2$	$\times 2$
2	4	6	8	10	12	14	16	18	20

Let's multiply. Cover everything above the line.

$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$
--	--	--	--	--	--	--	--

$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$
--	--	--	---	--	--	--	--

Look at the answers at the top of the page. Which problems will you study?

WHAT DO YOU KNOW ABOUT 16?

Use counters to prove these answers.

$$\begin{array}{r} 8 \\ + 8 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 7 \\ + 9 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 9 \\ + 7 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 6 \\ + 10 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 10 \\ + 6 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 16 \\ + 0 \\ \hline 16 \end{array}$$

Study these until you know them.

Write the answers.

Circle those with 16 for the answers.

$$\begin{array}{r} 9 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 9 \\ \hline \end{array}$$

Take something away from 16.

• • • • • • • • • ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ 16 - 6 =

• • • • • • • • ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ 16 - 7 =

• • • • • • • ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ 16 - 8 =

• • • • • • ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ 16 - 9 =

• • • • • ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ ~~•~~ 16 - 10 =

Write the missing numbers in these addition problems.

$$\begin{array}{r} 7 \\ + \\ \hline 16 \end{array}$$

$$\begin{array}{r} 9 \\ + \\ \hline 15 \end{array}$$

$$\begin{array}{r} 6 \\ + \\ \hline 14 \end{array}$$

$$\begin{array}{r} 8 \\ + \\ \hline 16 \end{array}$$

$$\begin{array}{r} 6 \\ + \\ \hline 15 \end{array}$$

$$\begin{array}{r} 9 \\ + \\ \hline 16 \end{array}$$

$$\begin{array}{r} 16 \\ + \\ \hline 16 \end{array}$$

$$\begin{array}{r} 10 \\ + \\ \hline 16 \end{array}$$

Write the missing numbers in these subtraction problems.

$$\begin{array}{r} 16 \\ - \\ \hline 10 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 16 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 8 \end{array}$$

Look at page 95. How many are correct? _____

Here are more subtraction problems with numbers missing.

$$\begin{array}{r} 6 \\ - 1 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 14 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 5 \end{array}$$

$$\begin{array}{r} 11 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 10 \\ - \\ \hline 3 \end{array}$$

$$\begin{array}{r} 14 \\ - \\ \hline 5 \end{array}$$

$$\begin{array}{r} 10 \\ - \\ \hline 5 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 5 \end{array}$$

$$\begin{array}{r} 10 \\ - \\ \hline 2 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 16 \end{array}$$

$$\begin{array}{r} 11 \\ - \\ \hline 5 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 11 \\ - \\ \hline 3 \end{array}$$

$$\begin{array}{r} 9 \\ - \\ \hline 4 \end{array}$$

$$\begin{array}{r} 14 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 10 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 10 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 14 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 10 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 14 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 9 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 13 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 3 \end{array}$$

$$\begin{array}{r} 9 \\ - \\ \hline 5 \end{array}$$

$$\begin{array}{r} 12 \\ - \\ \hline 4 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 11 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 10 \\ - \\ \hline 4 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 6 \end{array}$$

$$\begin{array}{r} 9 \\ - \\ \hline 6 \end{array}$$

Look at page 95. How many are correct? _____

Here are the answers to the problems on page 34.

Row A _____ 10 13 14 15 11 12 12 14

Row B _____ 10 15 15 10 13 15 15 10

Row C _____ 15 9 15 10 14 12 9 13

Row D _____ 9 13 11 15 14 13 14 11

WHAT DO YOU KNOW ABOUT 17 AND 18?

Use counters to prove these answers.
Study these until you know them.

$$\begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 8 \\ + 9 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 9 \\ + 9 \\ \hline 18 \end{array}$$

Draw 17 marbles.

Cross out 9 marbles. Are there 8 left? $17 - 9 = 8$

$$\begin{array}{r} 9 \quad 17 \\ + 8 \quad - 9 \\ \hline \end{array}$$

Draw 17 marbles.

Cross out 8 marbles. Are there 9 left? $17 - 8 = 9$

$$\begin{array}{r} 8 \quad 17 \\ + 9 \quad - 8 \\ \hline \end{array}$$

Draw 18 marbles.

Cross out 9 marbles. Are there 9 left? $18 - 9 = 9$

$$\begin{array}{r} 9 \quad 18 \\ + 9 \quad - 9 \\ \hline \end{array}$$

Subtract.

$$\begin{array}{r} 16 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 8 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 0 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ - 0 \\ \hline \end{array}$$

Write the missing numbers.

$$\begin{array}{r} 17 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 18 \\ - \\ \hline 17 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 16 \end{array}$$

$$\begin{array}{r} 18 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 9 \end{array}$$

$$\begin{array}{r} 17 \\ - \\ \hline 17 \end{array}$$

$$\begin{array}{r} 18 \\ - \\ \hline 0 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 7 \end{array}$$

$$\begin{array}{r} 17 \\ - \\ \hline 8 \end{array}$$

$$\begin{array}{r} 17 \\ - \\ \hline 0 \end{array}$$

$$\begin{array}{r} 17 \\ - \\ \hline 16 \end{array}$$

$$\begin{array}{r} 15 \\ - \\ \hline 14 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 15 \end{array}$$

$$\begin{array}{r} 16 \\ - \\ \hline 0 \end{array}$$

$$\begin{array}{r} 18 \\ - \\ \hline 18 \end{array}$$

MORE NUMBER WORDS

one
six

two
seven

three
eight

four
nine

five
ten

Write the word for each number.

1. _____

6. _____

2. _____

7. _____

3. _____

8. _____

4. _____

9. _____

5. _____

10. _____

Read these numbers and the number words.

11. eleven

15. fifteen

19. nineteen

12. twelve

16. sixteen

20. twenty

13. thirteen

17. seventeen

21. twenty-one

14. fourteen

18. eighteen

22. twenty-two

Write a number after each word.

seventeen _____ two _____ four _____

eleven _____ twelve _____ fourteen _____

sixteen _____ fifteen _____ nine _____

eight _____ seven _____ three _____

eighteen _____ five _____ thirteen _____

STORY PROBLEMS WITH NUMBER WORDS

There are ten apples in a basket.

Three apples are not good.

How many are good?

Write the answer.

Did you subtract? _____

$$\begin{array}{r} 10 \\ - 3 \\ \hline \end{array}$$

Mike has three airplanes.

He bought four more.

How many did he have then?

Write the problem and the answer.

Did you add? _____

Mother cat had five kittens.

Two kittens ran away.

How many were left?

Write the problem and the answer.

Did you subtract? _____

Sue ate three cookies.

Then she ate four more.

How many did she eat?

Write the problem and the answer.

Did you add? _____

A farmer had sixteen cows.

He sold nine of them.

How many did he have then?

Write the problem and the answer.

Did you subtract? _____

Jane has five dresses.

Ann has seven dresses.

How many dresses all together?

Write the problem and the answer.

Did you add? _____

Pam had twelve books.

She gave six to Steve.

How many did she have then?

Write the problem and the answer.

Did you subtract? _____

Jerry had seven marbles.

He bought eight more.

How many did he have then?

Write the problem and the answer.

Did you add? _____

Ask someone to look at your work. How many are correct? _____

Draw a line from each word to the number.

seven	nine	twenty	twelve	seventeen
	9	7	12	20
			17	
eighteen	five	eleven	fifteen	eight
	18	11	5	8
			15	
thirteen	six	nineteen	sixteen	fourteen
	19	13	6	14
			16	

Let's count by tens with number words.

10	20	30	40	50
ten	twenty	thirty	forty	fifty
60	70	80	90	100
sixty	seventy	eighty	ninety	one hundred

Write a number after each word.

thirty _____	fifty _____	one hundred _____
ten _____	ninety _____	sixty _____
two hundred _____	seventy _____	forty _____
eighty _____	twenty _____	six hundred _____

Are you ready for these?

seventy-one _____	thirty-seven _____	forty-two _____
fifty-six _____	eighty-nine _____	twenty-two _____
seventy-seven _____	thirty-three _____	thirty-nine _____
sixty-six _____	ninety-seven _____	eighty-one _____
fifty-two _____	forty-eight _____	eighty-five _____

Ask someone how many are right.

HAVE FUN WITH COLUMN ADDITION

Row A

4	3	2	5	7	6	8	3
5	4	7	3	1	2	2	5
+9	+5	+4	+8	+7	+9	+5	+9
<u>15</u>	<u>12</u>	<u>13</u>					

Row B

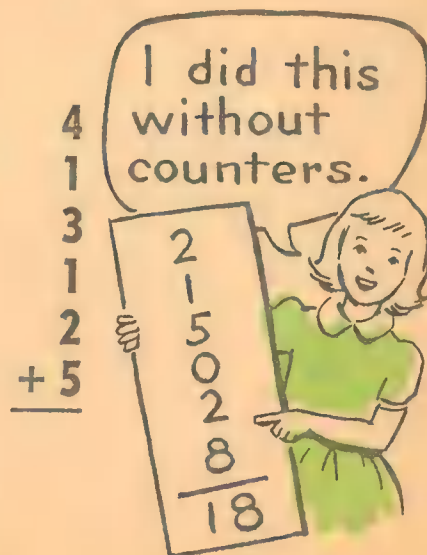
2	5	3	7	4	2	6	3
0	2	2	1	2	3	1	4
4	1	4	2	3	5	0	1
+7	+8	+3	+5	+8	+5	+8	+6
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Row C

4	3	2	1	6	4	7	5
1	0	3	3	0	2	1	1
2	3	2	5	2	1	0	2
3	5	1	1	1	2	2	0
+2	+1	+7	+6	+9	+8	+6	+3
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Row D

2	3	1	5	2
1	2	4	0	3
3	1	2	1	0
0	3	1	3	3
2	1	2	2	1
+8	+4	+3	+1	+9
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>



How many of your answers are correct? _____ See page 42.

WILL YOU ADD OR SUBTRACT?

Sally had five dolls.
 Mary Jo had three.
 How many dolls all together? _____
 Did you add? _____
 Did you subtract? _____

Ricky bought two pencils.
 He paid six cents for each.
 How much did he spend? _____
 Did you add? _____
 Did you subtract? _____

Jeff had ten dollars.
 He spent three dollars.
 How many dollars are left? _____
 Did you add? _____
 Did you subtract? _____

Ann picked seven flowers.
 Peggy picked five.
 How many flowers in all? _____
 Did you add? _____
 Did you subtract? _____

Six children were playing.
 Four of them were girls.
 How many were boys? _____
 Did you add? _____
 Did you subtract? _____

There are six trees in Ed's yard.
 There are eight in Dick's yard.
 How many trees all together? _____
 Did you add? _____
 Did you subtract? _____

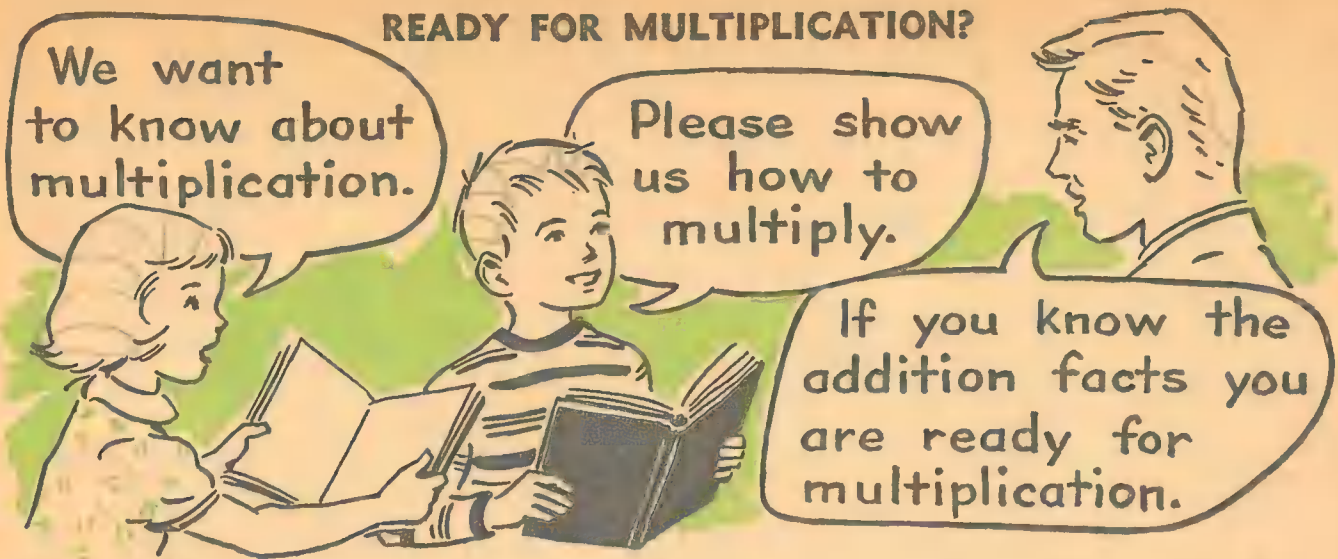
Tim picked twelve tomatoes.
 Jane picked nine.
 How many more did Tim pick? _____
 Did you add? _____
 Did you subtract? _____

A farmer had sixteen pigs.
 Eight pigs were spotted.
 How many were not? _____
 Did you add? _____
 Did you subtract? _____

Answers to Problems on Page 41

Row A	18	12	13	16	15	17	15	17
Row B	13	16	12	15	17	15	15	14
Row C	12	12	15	16	18	17	16	11
Row D	16	14	13	12	18	16		

READY FOR MULTIPLICATION?



Do you know all of these addition facts?

$\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$
$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$
$\begin{array}{r} 0 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 7 \\ \hline \end{array}$
$\begin{array}{r} 8 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$
$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 9 \\ \hline \end{array}$
$\begin{array}{r} 5 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 9 \\ \hline \end{array}$

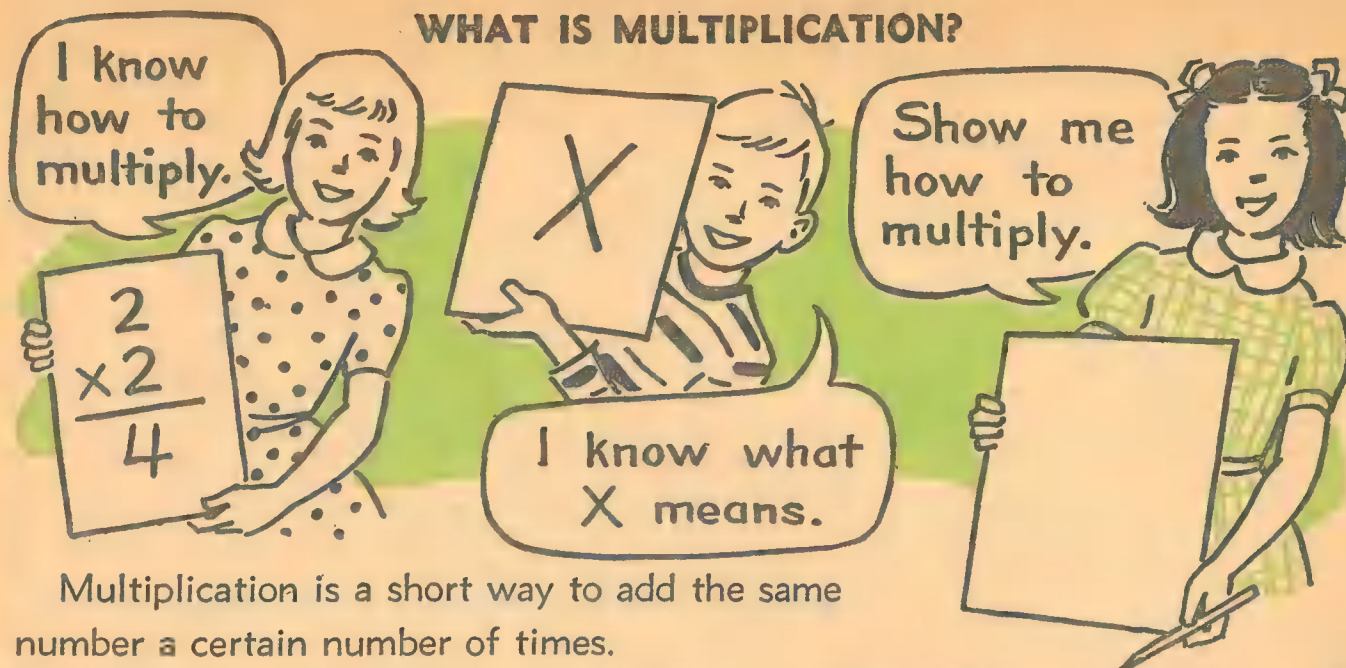
Check the answers with page 44. Are you ready for multiplication?

ONE HUNDRED ADDITION FACTS

A fact is something we can prove to be true.

$\begin{array}{r} 1 \\ +1 \\ \hline 2 \end{array}$	$\begin{array}{r} 2 \\ +1 \\ \hline 3 \end{array}$	$\begin{array}{r} 3 \\ +1 \\ \hline 4 \end{array}$	$\begin{array}{r} 4 \\ +1 \\ \hline 5 \end{array}$	$\begin{array}{r} 5 \\ +1 \\ \hline 6 \end{array}$	$\begin{array}{r} 6 \\ +1 \\ \hline 7 \end{array}$	$\begin{array}{r} 7 \\ +1 \\ \hline 8 \end{array}$	$\begin{array}{r} 8 \\ +1 \\ \hline 9 \end{array}$	$\begin{array}{r} 9 \\ +1 \\ \hline 10 \end{array}$	$\begin{array}{r} 10 \\ +1 \\ \hline 11 \end{array}$
$\begin{array}{r} 1 \\ +2 \\ \hline 3 \end{array}$	$\begin{array}{r} 2 \\ +2 \\ \hline 4 \end{array}$	$\begin{array}{r} 3 \\ +2 \\ \hline 5 \end{array}$	$\begin{array}{r} 4 \\ +2 \\ \hline 6 \end{array}$	$\begin{array}{r} 5 \\ +2 \\ \hline 7 \end{array}$	$\begin{array}{r} 6 \\ +2 \\ \hline 8 \end{array}$	$\begin{array}{r} 7 \\ +2 \\ \hline 9 \end{array}$	$\begin{array}{r} 8 \\ +2 \\ \hline 10 \end{array}$	$\begin{array}{r} 9 \\ +2 \\ \hline 11 \end{array}$	$\begin{array}{r} 10 \\ +2 \\ \hline 12 \end{array}$
$\begin{array}{r} 1 \\ +3 \\ \hline 4 \end{array}$	$\begin{array}{r} 2 \\ +3 \\ \hline 5 \end{array}$	$\begin{array}{r} 3 \\ +3 \\ \hline 6 \end{array}$	$\begin{array}{r} 4 \\ +3 \\ \hline 7 \end{array}$	$\begin{array}{r} 5 \\ +3 \\ \hline 8 \end{array}$	$\begin{array}{r} 6 \\ +3 \\ \hline 9 \end{array}$	$\begin{array}{r} 7 \\ +3 \\ \hline 10 \end{array}$	$\begin{array}{r} 8 \\ +3 \\ \hline 11 \end{array}$	$\begin{array}{r} 9 \\ +3 \\ \hline 12 \end{array}$	$\begin{array}{r} 10 \\ +3 \\ \hline 13 \end{array}$
$\begin{array}{r} 1 \\ +4 \\ \hline 5 \end{array}$	$\begin{array}{r} 2 \\ +4 \\ \hline 6 \end{array}$	$\begin{array}{r} 3 \\ +4 \\ \hline 7 \end{array}$	$\begin{array}{r} 4 \\ +4 \\ \hline 8 \end{array}$	$\begin{array}{r} 5 \\ +4 \\ \hline 9 \end{array}$	$\begin{array}{r} 6 \\ +4 \\ \hline 10 \end{array}$	$\begin{array}{r} 7 \\ +4 \\ \hline 11 \end{array}$	$\begin{array}{r} 8 \\ +4 \\ \hline 12 \end{array}$	$\begin{array}{r} 9 \\ +4 \\ \hline 13 \end{array}$	$\begin{array}{r} 10 \\ +4 \\ \hline 14 \end{array}$
$\begin{array}{r} 1 \\ +5 \\ \hline 6 \end{array}$	$\begin{array}{r} 2 \\ +5 \\ \hline 7 \end{array}$	$\begin{array}{r} 3 \\ +5 \\ \hline 8 \end{array}$	$\begin{array}{r} 4 \\ +5 \\ \hline 9 \end{array}$	$\begin{array}{r} 5 \\ +5 \\ \hline 10 \end{array}$	$\begin{array}{r} 6 \\ +5 \\ \hline 11 \end{array}$	$\begin{array}{r} 7 \\ +5 \\ \hline 12 \end{array}$	$\begin{array}{r} 8 \\ +5 \\ \hline 13 \end{array}$	$\begin{array}{r} 9 \\ +5 \\ \hline 14 \end{array}$	$\begin{array}{r} 10 \\ +5 \\ \hline 15 \end{array}$
$\begin{array}{r} 1 \\ +6 \\ \hline 7 \end{array}$	$\begin{array}{r} 2 \\ +6 \\ \hline 8 \end{array}$	$\begin{array}{r} 3 \\ +6 \\ \hline 9 \end{array}$	$\begin{array}{r} 4 \\ +6 \\ \hline 10 \end{array}$	$\begin{array}{r} 5 \\ +6 \\ \hline 11 \end{array}$	$\begin{array}{r} 6 \\ +6 \\ \hline 12 \end{array}$	$\begin{array}{r} 7 \\ +6 \\ \hline 13 \end{array}$	$\begin{array}{r} 8 \\ +6 \\ \hline 14 \end{array}$	$\begin{array}{r} 9 \\ +6 \\ \hline 15 \end{array}$	$\begin{array}{r} 10 \\ +6 \\ \hline 16 \end{array}$
$\begin{array}{r} 1 \\ +7 \\ \hline 8 \end{array}$	$\begin{array}{r} 2 \\ +7 \\ \hline 9 \end{array}$	$\begin{array}{r} 3 \\ +7 \\ \hline 10 \end{array}$	$\begin{array}{r} 4 \\ +7 \\ \hline 11 \end{array}$	$\begin{array}{r} 5 \\ +7 \\ \hline 12 \end{array}$	$\begin{array}{r} 6 \\ +7 \\ \hline 13 \end{array}$	$\begin{array}{r} 7 \\ +7 \\ \hline 14 \end{array}$	$\begin{array}{r} 8 \\ +7 \\ \hline 15 \end{array}$	$\begin{array}{r} 9 \\ +7 \\ \hline 16 \end{array}$	$\begin{array}{r} 10 \\ +7 \\ \hline 17 \end{array}$
$\begin{array}{r} 1 \\ +8 \\ \hline 9 \end{array}$	$\begin{array}{r} 2 \\ +8 \\ \hline 10 \end{array}$	$\begin{array}{r} 3 \\ +8 \\ \hline 11 \end{array}$	$\begin{array}{r} 4 \\ +8 \\ \hline 12 \end{array}$	$\begin{array}{r} 5 \\ +8 \\ \hline 13 \end{array}$	$\begin{array}{r} 6 \\ +8 \\ \hline 14 \end{array}$	$\begin{array}{r} 7 \\ +8 \\ \hline 15 \end{array}$	$\begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array}$	$\begin{array}{r} 9 \\ +8 \\ \hline 17 \end{array}$	$\begin{array}{r} 10 \\ +8 \\ \hline 18 \end{array}$
$\begin{array}{r} 1 \\ +9 \\ \hline 10 \end{array}$	$\begin{array}{r} 2 \\ +9 \\ \hline 11 \end{array}$	$\begin{array}{r} 3 \\ +9 \\ \hline 12 \end{array}$	$\begin{array}{r} 4 \\ +9 \\ \hline 13 \end{array}$	$\begin{array}{r} 5 \\ +9 \\ \hline 14 \end{array}$	$\begin{array}{r} 6 \\ +9 \\ \hline 15 \end{array}$	$\begin{array}{r} 7 \\ +9 \\ \hline 16 \end{array}$	$\begin{array}{r} 8 \\ +9 \\ \hline 17 \end{array}$	$\begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array}$	$\begin{array}{r} 10 \\ +9 \\ \hline 19 \end{array}$
$\begin{array}{r} 1 \\ +0 \\ \hline 1 \end{array}$	$\begin{array}{r} 2 \\ +0 \\ \hline 2 \end{array}$	$\begin{array}{r} 3 \\ +0 \\ \hline 3 \end{array}$	$\begin{array}{r} 4 \\ +0 \\ \hline 4 \end{array}$	$\begin{array}{r} 5 \\ +0 \\ \hline 5 \end{array}$	$\begin{array}{r} 6 \\ +0 \\ \hline 6 \end{array}$	$\begin{array}{r} 7 \\ +0 \\ \hline 7 \end{array}$	$\begin{array}{r} 8 \\ +0 \\ \hline 8 \end{array}$	$\begin{array}{r} 9 \\ +0 \\ \hline 9 \end{array}$	$\begin{array}{r} 0 \\ +0 \\ \hline 0 \end{array}$

WHAT IS MULTIPLICATION?



Multiplication is a short way to add the same number a certain number of times.



There are several ways to find how many apples are here.

We could count them 1, 2, 3, etc. That is a slow way.

We could count them by 2's. That is a little faster.

There are two apples in each group. We could add them this way

or this way:

$$2 + 2 + 2 + 2 + 2 = 10$$

$$\begin{array}{r} 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ + 2 \\ \hline 10 \end{array}$$

But that is a slow way, too. So—let's multiply.



How many times do you see two apples? Five times? That is right.

We know there are ten apples.

We see two apples five times. So we say, "Five times two are ten."

We write it this way: $5 \times 2 = 10$, or this way: $\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$

\times means times in multiplication.



THIS IS MULTIPLICATION



How many times do you see two boys? Three times? That is right.

We know there are six boys here.

We see two boys three times. So we say, "Three times two are six."

We write it this way: $3 \times 2 = 6$, or this way:
$$\begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array}$$

• • $1 \times 2 = 2$

• • • • $2 \times 2 = 4$

• • • • • • $3 \times 2 = 6$

• • • • • • • • $4 \times 2 = 8$

• • • • • • • • • • $5 \times 2 = 10$

• • • • • • • • • • • • $6 \times 2 = 12$

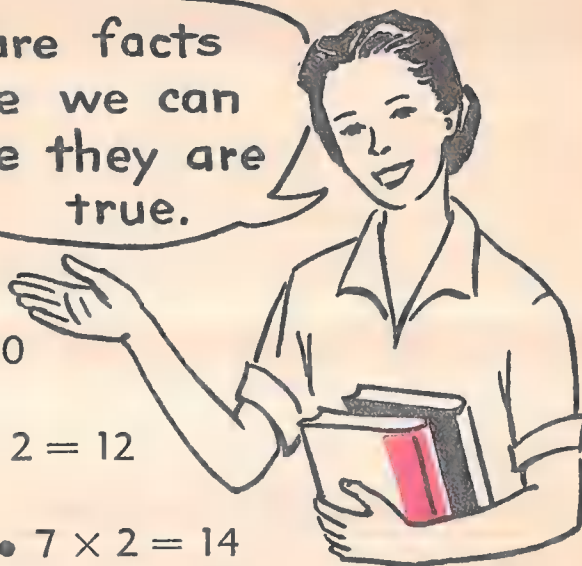
• • • • • • • • • • • • • • $7 \times 2 = 14$

• • • • • • • • • • • • • • • • $8 \times 2 = 16$

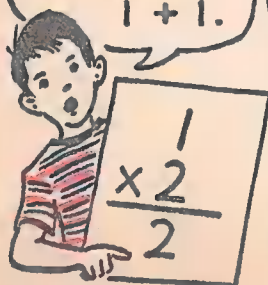
• • • • • • • • • • • • • • • • • • $9 \times 2 = 18$

• $10 \times 2 = 20$

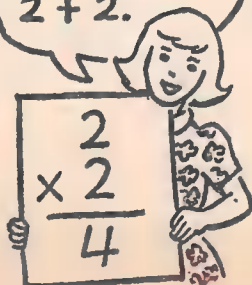
These are facts
because we can
prove they are
true.



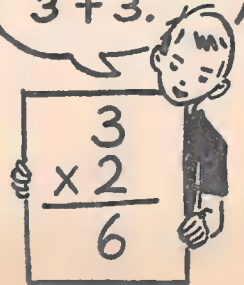
1×2 is the
same as
 $1 + 1$.



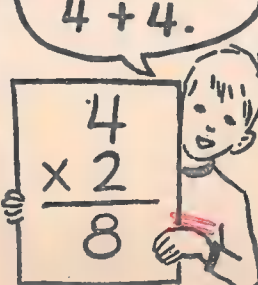
2×2 is the
same as
 $2 + 2$.



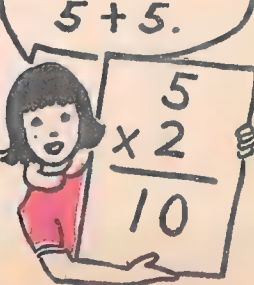
3×2 is the
same as
 $3 + 3$.



4×2 is the
same as
 $4 + 4$.



5×2 is the
same as
 $5 + 5$.



MORE COLUMN ADDITION

Start at the top of each column and add down.

Row A

3	6	2	3	2	7	4	8
2	0	5	4	3	0	4	1
+ 5	+ 7	+ 7	+ 8	+ 6	+ 5	+ 4	+ 5
<u>10</u>	<u>13</u>	<u>14</u>	<u>15</u>				

Row B

2	3	3	2	2	3	4	2
1	5	2	2	4	3	2	3
4	0	1	2	2	2	0	5
+ 3	+ 7	+ 9	+ 4	+ 5	+ 7	+ 9	+ 0
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Row C

5	2	1	4	3	5	1	4
0	1	4	1	1	1	0	4
3	5	4	2	2	0	3	4
+ 7	+ 1	+ 6	+ 3	+ 8	+ 6	+ 5	+ 1
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

Row D

2	5	3	4	3	6	3	2
1	1	3	0	4	1	0	3
3	6	3	5	4	1	2	4
+ 3	+ 1	+ 2	+ 6	+ 3	+ 5	+ 9	+ 2
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>

You will find the answers to these problems on page 36.
How many of your answers are correct? _____

MULTIPLYING BY 3

How many times do you see three nails? One time?



$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

Are there three nails? One times three are three. $1 \times 3 = 3$

How many times do you see three houses? Two times?



$$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$

Are there six houses? Two times three are six. $2 \times 3 = 6$

How many times do you see three birds? Three times?



$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

Are there nine birds? Three times three are nine. $3 \times 3 = 9$

How many times do you see three chairs? Four times?



$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

Are there twelve chairs? Four times three are twelve. $4 \times 3 = 12$

How many times do you see three blocks? Five times?



$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

Are there fifteen blocks? Five times three are fifteen. $5 \times 3 = 15$

How many times do you see three balls? Six times?



$$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$$

Are there eighteen balls? Six times three are eighteen. $6 \times 3 = 18$

How many times do you see three apples? Seven times?



$$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$$

Are there twenty-one apples? Seven times three are twenty-one. $7 \times 3 = 21$

How many times do you see three circles? Eight times?



$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

Are there twenty-four circles? Eight times three are twenty-four.

How many times do you see three marbles? Nine times?



$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

Are there twenty-seven marbles? Nine times three are twenty-seven.

How many times do you see three books? Ten times?



$$\begin{array}{r} 10 \\ \times 3 \\ \hline \end{array}$$

Are there thirty books? Ten times three are thirty.

$$3 \times 1 = 3$$

$$3 \times 6 = 18$$

Study the table of 3's.

Look at the answers.

$$3 \times 2 = 6$$

$$3 \times 7 = 21$$

The table of 3's is the same
as counting by 3's.

$$3 \times 3 = 9$$

$$3 \times 8 = 24$$

$$3 \times 4 = 12$$

$$3 \times 9 = 27$$

$$3 \times 5 = 15$$

$$3 \times 10 = 30$$

Let's multiply. Cover everything above the line.

$$\begin{array}{r} 3 \\ \times 3 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

Look at the answers. Which ones do you need to study?

HOW DO YOU USE NUMBERS?

Read the questions and write the numbers.



1. How old are you? _____
2. What is your telephone number? _____
3. What is your house number? _____
4. How many sisters do you have? _____
5. How many brothers do you have? _____
6. How many children in your family? _____
7. How many people live in your home? _____
8. How many pets are there in your home? _____
9. How many rooms in your home? _____
10. How old will you be on your next birthday? _____
11. What year is this? _____

Let's count by 3's.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36

Write numbers by 3's. Begin with 3.

_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

THREE KINDS OF PROBLEMS

Will you add?

Will you subtract?

Will you multiply?

$$\begin{array}{r} 17 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ -0 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ -0 \\ \hline \end{array}$$

Check your answers with page 95. How many are correct? _____

Which ones do you need to study?

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$

Check your answers with page 94. How many are correct? _____

Which ones do you need to study?

$$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 6 \\ \hline \end{array}$$

Check your answers with page 44. How many are correct? _____

Which ones do you need to study?

STORY PROBLEMS WITH MULTIPLICATION

Jim has eight crayons. Wendy has two times as many. How many does Wendy have?

Mary frosted seven cookies. Sally frosted twice as many. How many did Sally frost?

Betsy walks to school two times each school day. How many times does she walk to school in five days?

Robert is eight years old. He has seen his grandmother three times each year. How many times has he seen her?

Cindy picked seven tulips. Her mother picked three times as many. How many did her mother pick?

Tim helps his father two hours every day. How many hours does he work in four days?

Tom sold six baskets of apples for three dollars a basket. How much money did he get?

Dave used two cans of paint for the doghouse. He used three times as much for the fence. How many cans did he use for the fence?

Steve brushes his teeth two times each day. How many times does he brush them in seven days?

Peggy lives three blocks from school. Jim lives three times as far. How far does Jim live?

WHAT DO YOU KNOW ABOUT ROMAN NUMBERS?



What a funny clock!

What time is it?

It is half past 3.

Look!
It has Roman numbers.

Where have you seen Roman numbers?
Do you know how to read them?

Here are three ways to write numbers.

1	one	I	7	seven	VII
2	two	II	8	eight	VIII
3	three	III	9	nine	IX
4	four	IV	10	ten	X
5	five	V	11	eleven	XI
6	six	VI	12	twelve	XII

Write a Roman number in each space.

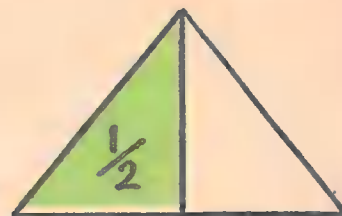
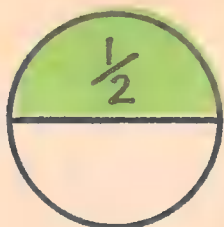
What grade are you in? _____ How old are you? _____

Write a Roman number under each of these numbers.

1	2	3	4	5	6
_____	_____	_____	_____	_____	_____
7	8	9	10	11	12
_____	_____	_____	_____	_____	_____

WHAT DO YOU KNOW ABOUT FRACTIONS?

A fraction is part of a whole thing.



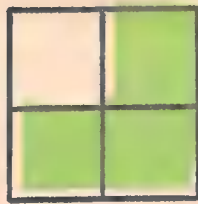
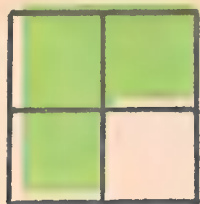
Each of these is divided into two equal parts.
Each part is one half of the whole thing.

We write one half like this: $\frac{1}{2}$
Write $\frac{1}{2}$ in each half that is white.



Each of these is divided into four equal parts.
Each part is one fourth of the whole thing.

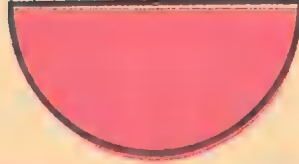
We write one fourth like this: $\frac{1}{4}$
Write $\frac{1}{4}$ in each part that is white.



A fraction of each of these is white. Is it $\frac{1}{2}$ or $\frac{1}{4}$?
Write the fraction in each part.

Ask someone if you have written the correct fraction.

One half and one half are two halves or one whole.



$$\frac{1}{2} + \frac{1}{2} = 1$$

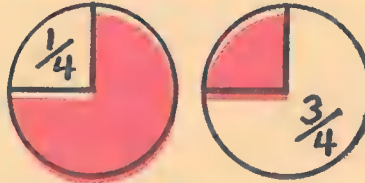
Look at this picture.

Write the problem and the answer.



Look at this picture.

Write the problem and the answer.



$\frac{1}{4}$ is sometimes called one quarter of a whole thing.

Did you know that a quarter

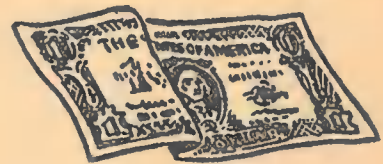


is $\frac{1}{4}$ of a dollar?

There are four quarters in one dollar.



=



There are two quarters
in a half dollar.



=



=



There are two half dollars
in a dollar.

MULTIPLYING BY 4

How many times do you see four birds? One time?



$$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$$

Are there four birds? $1 \times 4 = 4$

How many times do you see four oranges? Two times?



$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

Are there eight oranges? $2 \times 4 = 8$

How many times do you see four boards? Three times?



$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

Are there twelve boards? $3 \times 4 = 12$

How many times do you see four turtles? Four times?



$$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$$

Are there sixteen turtles? $4 \times 4 = 16$

How many times do you see four stars? Five times?



$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

Are there twenty stars? $5 \times 4 = 20$

How many times do you see four moons? Six times?



$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

Are there twenty-four moons? $6 \times 4 = 24$

How many times do you see four pencils? Seven times?



$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

Are there twenty-eight pencils? $7 \times 4 = 28$

How many times do you see four flowers? Eight times?



$$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$$

Are there thirty-two flowers? $8 \times 4 = 32$

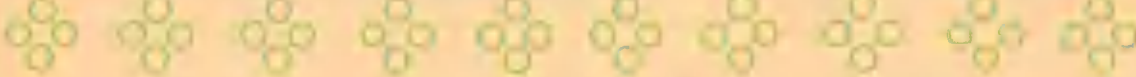
How many times do you see four marbles? Nine times?



$$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$$

Are there thirty-six marbles? $9 \times 4 = 36$

How many times do you see four circles? Ten times?



$$\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$$

Are there forty circles? $10 \times 4 = 40$

Study the table of 4's.

$\begin{array}{r} 4 \\ \times 1 \\ \hline 4 \end{array}$	$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array}$	$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$	$\begin{array}{r} 4 \\ \times 4 \\ \hline 16 \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline 20 \end{array}$	$\begin{array}{r} 4 \\ \times 6 \\ \hline 24 \end{array}$	$\begin{array}{r} 4 \\ \times 7 \\ \hline 28 \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline 32 \end{array}$	$\begin{array}{r} 4 \\ \times 9 \\ \hline 36 \end{array}$	$\begin{array}{r} 4 \\ \times 10 \\ \hline 40 \end{array}$
--	--	---	---	---	---	---	---	---	--

Do you know how to count by 4's. Let's try it.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47	48

Write numbers by 4's. Start with 4.

4

56

THE TABLES OF 2'S AND 3'S

Say these over and over. When you are sure you know them, cover them and write the answers to the problems below the line.

$2 \times 1 = 2$

$2 \times 6 = 12$

$3 \times 1 = 3$

$3 \times 6 = 18$

$2 \times 2 = 4$

$2 \times 7 = 14$

$3 \times 2 = 6$

$3 \times 7 = 21$

$2 \times 3 = 6$

$2 \times 8 = 16$

$3 \times 3 = 9$

$3 \times 8 = 24$

$2 \times 4 = 8$

$2 \times 9 = 18$

$3 \times 4 = 12$

$3 \times 9 = 27$

$2 \times 5 = 10$

$2 \times 10 = 20$

$3 \times 5 = 15$

$3 \times 10 = 30$

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

MORE ABOUT TELLING TIME



Look at the clock in the picture. The long hand has gone $\frac{1}{4}$ of the way around from 12. We know that $\frac{1}{4}$ is the same as one quarter. Tony says that it is a quarter after 8. Jan says that it is 15 minutes after 8. Their father says that it is 8:15. All are correct.

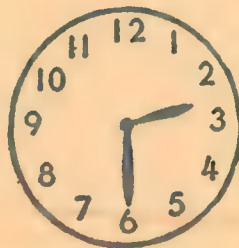
Look at these clocks.



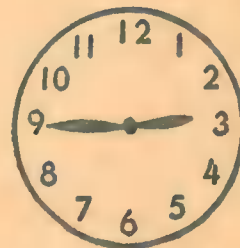
2 o'clock



a quarter after 2

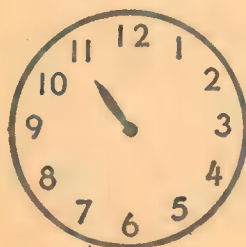


half past 2



a quarter before 3

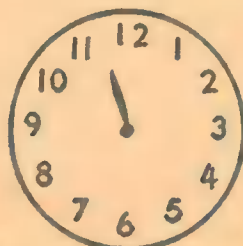
Draw the minute hand on each clock.



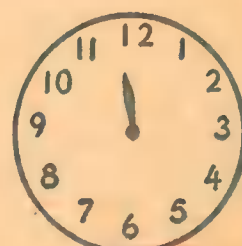
11 o'clock



a quarter past 11



half past 11



a quarter before 12

PRACTICE MULTIPLICATION

$1 \times 2 = 2$

$1 \times 3 = 3$

$1 \times 4 =$

$9 \times 2 =$

$2 \times 2 = 4$

$2 \times 3 =$

$2 \times 4 =$

$10 \times 2 =$

$3 \times 2 = 5$

$3 \times 3 =$

$3 \times 4 =$

$9 \times 3 =$

$4 \times 2 = 8$

$4 \times 3 =$

$4 \times 4 =$

$10 \times 3 =$

$5 \times 2 = 10$

$5 \times 3 =$

$5 \times 4 =$

$9 \times 4 =$

$6 \times 2 = 12$

$6 \times 3 =$

$6 \times 4 =$

$10 \times 4 =$

$7 \times 2 = 14$

$7 \times 3 =$

$7 \times 4 =$

$8 \times 2 = 16$

$8 \times 3 =$

$8 \times 4 =$



$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$$

Check your answers with page 94. Which ones do you need to study?

STORY PROBLEMS WITH MULTIPLICATION

Mary bought three big ice cream cones. Each cone cost ten cents. How much did she spend?

$$\begin{array}{r} 3 \\ \times 10 \\ \hline \end{array} \quad 3 \times 10 =$$

Three children had a picnic. Each child brought three sandwiches. How many sandwiches were there? Write the problem.

Don had four bags of candy. There were three candy bars in each bag. How many candy bars?

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array} \quad 4 \times 3 =$$

The boys had three baseball teams. Nine boys were on each team. How many boys all together? Write the problem.

Ann had four boxes. In each box there were six beads. How many beads were there?

$$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array} \quad 4 \times 6 =$$

A man had two boxes of eggs. In each box there were six eggs. How many eggs were there? Write the problem.

There are seven days in a week. Steve ate two cookies every day. How many cookies did he eat in a week?

$$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array} \quad 7 \times 2 =$$

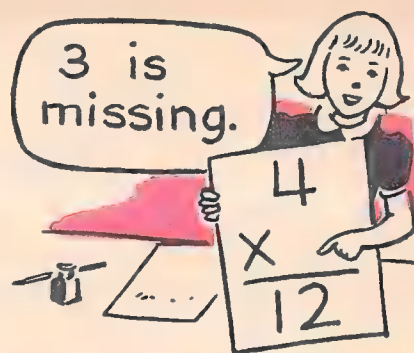
Three groups of girls played a game. Three girls were in each group. How many girls were there? Write the problem.

WHAT IS MISSING?

Are these multiplication problems? _____ Subtraction? _____ Addition? _____



Write the missing numbers.



$\begin{array}{r} 2 \\ \times \\ \hline 4 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 6 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 27 \end{array}$	$\begin{array}{r} 2 \\ \times \\ \hline 6 \end{array}$	$\begin{array}{r} 4 \\ \times \\ \hline 12 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 18 \end{array}$	$\begin{array}{r} 2 \\ \times \\ \hline 16 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 30 \end{array}$
$\begin{array}{r} 4 \\ \times \\ \hline 8 \end{array}$	$\begin{array}{r} 4 \\ \times \\ \hline 36 \end{array}$	$\begin{array}{r} 2 \\ \times \\ \hline 8 \end{array}$	$\begin{array}{r} 2 \\ \times \\ \hline 14 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 12 \end{array}$	$\begin{array}{r} 4 \\ \times \\ \hline 4 \end{array}$	$\begin{array}{r} 2 \\ \times \\ \hline 10 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 24 \end{array}$
$\begin{array}{r} 3 \\ \times \\ \hline 3 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 15 \end{array}$	$\begin{array}{r} 4 \\ \times \\ \hline 20 \end{array}$	$\begin{array}{r} 2 \\ \times \\ \hline 18 \end{array}$	$\begin{array}{r} 4 \\ \times \\ \hline 28 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 21 \end{array}$	$\begin{array}{r} 3 \\ \times \\ \hline 9 \end{array}$	$\begin{array}{r} 4 \\ \times \\ \hline 24 \end{array}$

Check your answers with page 94. How many are correct? _____

Let's review number words. Write a number for each word.

two _____	thirty _____	fifty _____
twelve _____	twenty-five _____	fifty-two _____
eleven _____	twenty _____	thirty-six _____
three _____	nineteen _____	forty _____
thirteen _____	seventy _____	fourteen _____
seventeen _____	sixty _____	eighty-one _____

MULTIPLYING BY 5

The fives are fun. Use counters to prove these answers.

$$\begin{array}{r} 5 \\ \times 1 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 5 \\ \times 6 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 5 \\ \times 7 \\ \hline 35 \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 5 \\ \times 10 \\ \hline 50 \end{array}$$

I count
nickles
by 5's.



Study each problem. They will be easy because you can count by 5's.

Cover everything above the line then write the answers.

$5 \times 1 =$

$5 \times 6 =$

$3 \times 5 =$

$5 \times 2 =$

$5 \times 7 =$

$9 \times 5 =$

$5 \times 3 =$

$5 \times 8 =$

$7 \times 5 =$

$5 \times 4 =$

$5 \times 9 =$

$4 \times 5 =$

$5 \times 5 =$

$5 \times 10 =$

$6 \times 4 =$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

FUN WITH MONEY

What do you remember about money?

A nickel is _____ cents.

A penny is _____ cent.

A quarter is _____ cents.

A dollar is _____ cents.

A dime is _____ cents.

A half dollar is _____ cents.

The sign for cent is ¢.

1¢ means one cent.

The sign for dollar is \$.

\$1 means one dollar.

\$1.00 means one dollar and no cents.

\$1.10 means one dollar and ten cents.

\$1.25 means one dollar and twenty-five cents.

Are two half dollars the same amount as one dollar? _____

Are two quarters the same amount as one half dollar? _____

Are four quarters the same amount as one dollar? _____

Count the nickels by 5's.

How much money is it? _____



Count the dimes by 10's.

How much money is it? _____



Write these in figures.

two dollars _____

twenty-six cents _____

fifty cents _____

fifteen cents _____

sixteen dollars _____

seventy cents _____

five dollars _____

fifty dollars _____

seventeen cents _____

forty cents _____

forty-six cents _____

one dollar and ten cents _____

six dollars and fifty cents _____

five dollars and ten cents _____

three dollars and thirty cents _____

thirty-five cents _____

one hundred dollars _____

five hundred dollars _____

seventy-five dollars _____

A dollar and a quarter _____

two dollars and a half _____

ten dollars and sixty cents _____



Tony and Jan made a store in their playroom. They marked a price on each article in the store. Their friends like to play store with them. They use play money to buy things. Tony and Jan know how to make change. Do you?

<p>Tom bought a tablet and a ball. How much did he spend? _____ He gave the clerk 20¢. How much money did Tom get back? _____</p>	<p>Sue bought a box of candy. How much did she spend? _____ She gave the clerk \$5.00. How much money did she get back? _____</p>
<p>Ann bought an ice cream cone. She gave the clerk a dime. How much money did she get back?</p>	<p>Dave bought a toy dog. He gave the clerk \$5.00. How much money did he get back? _____</p>
<p>Karen bought three balls. How much did she spend? _____ She gave the clerk 20¢. How much money did she get back? _____</p>	<p>Jim bought a kite and a pencil. How much did he spend? _____ He gave the clerk a quarter. How much money did he get back? _____</p>

Circle the amount in each row that means most.

25¢	19¢	14¢	75¢	50¢	95¢
\$1.50	\$1.65	\$1.95	\$1.69	\$1.99	\$1.00
\$5.50	\$5.75	\$9.00	\$8.75	\$4.50	\$6.99

REVIEW MULTIPLICATION FACTS

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$$

Check your answers with page 94. How many are correct? _____

Which ones do you need to study? Write them here.

Nancy Ruzbar

DO YOU KNOW THIS?

It is 5 minutes after 10.



It is 5 minutes before 2.



The long hand is the minute hand. It moves from one number to the next number every five minutes. The space between numbers is five minutes.

If you can count by 5's you can tell time the way Jan and Tony do. What time does the big clock say?

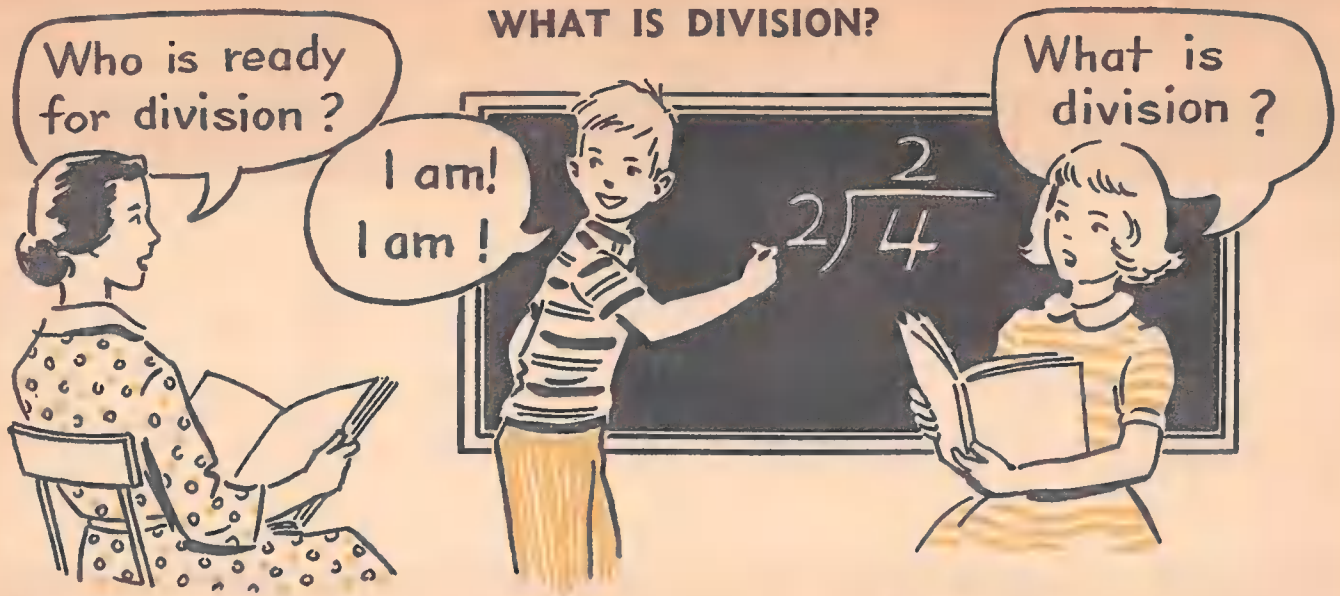


Count by 5's as your finger moves around the clock touching each number beginning with 1. Are there 60 minutes around the clock?



The big clock says 10 minutes after 7, or 7:10. This little clock says 20 minutes after 8, or 8:20.

WHAT IS DIVISION?



Division means to separate or to divide something into parts.

Here are 9 crayons and 3 children.

Divide the crayons evenly among the children.



We write the problem this way: $\frac{3}{9}$ or this way $9 \div 3 = 3$

Read the problem this way: 9 divided by 3 are 3.

We can prove this is correct because we know that $3 \times 3 = 9$.

Look at the problem again. Each part has a name.

This is the divisor.
It does the work.

$\frac{3}{3 \over 9}$

The answer is called the quotient.
This is called a bracket.
This is the dividend.

Let's divide 12 pieces of candy among 4 children.

Each child will have 3 pieces. $\frac{3}{4 \over 12}$

We can prove this is correct because we know that $4 \times 3 = 12$.

Divide 16 cookies among 4 people.

Will there be 4 cookies for each? $\frac{4}{4 \over 16}$

We can prove this is correct because we know that $4 \times 4 = 16$.

THIS IS DIVISION

Use counters for these.

Divide 12 counters into 2 equal groups.

Count them. Are there 6 in each group?

This is correct because we know that $6 \times 2 = 12$.

Say the problem this way, "12 divided by 2 are 6."

The sign for division is \div

$$\begin{array}{r} 6 \\ 2 \overline{)12} \end{array}$$

$$12 \div 2 = 6$$

Divide 12 counters into 3 equal groups.

Count them. Are there 4 in each group?

This is correct because $4 \times 3 = 12$.

Say it this way, "12 divided by 3 are 4."

Write the answer.

$$3 \overline{)12}$$

Divide 18 counters into 3 equal groups.

Count them. Are there 6 in each group?

This is correct because $3 \times 6 = 18$.

Write the problem and the answer.

Divide 21 counters into 3 equal groups.

Count them. Are there 7 in each group?

This is correct because $3 \times 7 = 21$.

Write the problem and the answer.

Divide 20 counters into 4 equal groups.

Are there 5 in each group?

This is correct because $5 \times 4 = 20$.

Write the problem and the answer.

Divide 28 counters into 4 equal groups.

Are there 7 in each group?

This is correct because $4 \times 7 = 28$.

Write the problem and the answer.

DIVIDING BY 2, 3, 4, AND 5

It is easy to prove answers to division problems. Just multiply the answer by the divisor. If that answer is the same as the dividend, the answer to your division problem is correct. Try it.

$$\begin{array}{r} \text{Divisor} \\ 7 \\ 4 \overline{)28} \\ \text{Dividend} \\ 7 \times 4 = 28 \end{array}$$

Do these without counters. If you know the tables of 2's, 3's, 4's, and 5's, they will be easy for you. Be sure to prove your answers.

$$2 \overline{)4} = 2$$

$$2 \overline{)16} = 8$$

$$2 \overline{)6} = 3$$

$$2 \overline{)14} = 7$$

$$2 \overline{)20} = 10$$

$$2 \overline{)8} = 4$$

$$2 \overline{)12} = 6$$

$$2 \overline{)10} = 5$$

$$2 \overline{)18} = 9$$

$$2 \overline{)2} = 1$$

$$3 \overline{)9} = 3$$

$$3 \overline{)24} = 8$$

$$3 \overline{)18} = 6$$

$$3 \overline{)27} = 9$$

$$3 \overline{)12} = 4$$

$$3 \overline{)15} = 5$$

$$3 \overline{)6} = 2$$

$$3 \overline{)21} = 7$$

$$3 \overline{)3} = 1$$

$$3 \overline{)30} = 10$$

$$4 \overline{)24} = 6$$

$$4 \overline{)4} = 1$$

$$4 \overline{)32} = 8$$

$$4 \overline{)12} = 3$$

$$4 \overline{)20} = 5$$

$$4 \overline{)36} = 9$$

$$4 \overline{)16} = 4$$

$$4 \overline{)8} = 2$$

$$4 \overline{)40} = 10$$

$$4 \overline{)28} = 7$$

$$5 \overline{)30} = 6$$

$$5 \overline{)20} = 4$$

$$5 \overline{)50} = 10$$

$$5 \overline{)10} = 2$$

$$5 \overline{)35} = 7$$

$$5 \overline{)45} = 9$$

$$5 \overline{)5} = 1$$

$$5 \overline{)40} = 8$$

$$5 \overline{)15} = 3$$

$$5 \overline{)25} = 5$$

STORY PROBLEMS WITH DIVISION

Do these without counters.

Divide fifteen cookies equally among five children. How many will each child have?

Mike bought four ice cream cones for twenty-four cents. How much did each cone cost?

Divide twenty crayons equally among four children. How many will each child have?

Sixteen children divided themselves into four groups for games. How many were in each group?

Ted bought three apples for thirty cents. How much did each apple cost? Divide to find out.

How many pencils can Sue buy for thirty cents? Each pencil costs five cents.

Mary Ann put nine dolls into three equal groups. How many dolls were in each group?

Divide twenty-one peanuts equally among three children. How many will each child have?

There were eighteen pieces of paper for three children. How many did each child have?

Gail paid twenty-five cents for five peaches. How much did each peach cost?

PRACTICE DIVISION

$$2\overline{)8^4}$$

$$5\overline{)30}$$

$$4\overline{)8}$$

$$2\overline{)10}$$

$$2\overline{)6}$$

$$3\overline{)9}$$

$$2\overline{)14}$$

$$3\overline{)21}$$

$$4\overline{)32}$$

$$3\overline{)18}$$

$$4\overline{)24}$$

$$4\overline{)8}$$

$$2\overline{)12}$$

$$5\overline{)35}$$

$$2\overline{)4}$$

$$2\overline{)2}$$

$$4\overline{)20}$$

$$4\overline{)4}$$

$$4\overline{)36}$$

$$3\overline{)30}$$

$$3\overline{)15}$$

$$3\overline{)27}$$

$$4\overline{)16}$$

$$3\overline{)12}$$

$$2\overline{)18}$$

$$3\overline{)3}$$

$$4\overline{)28}$$

$$2\overline{)16}$$

$$3\overline{)24}$$

$$5\overline{)25}$$

$$4\overline{)12}$$

$$4\overline{)40}$$

Prove each answer to be sure it is correct.

The first problem is correct because $4 \times 2 = 8$.

FOUR KINDS OF PROBLEMS

Do you add?

Do you multiply?

Do you divide?

Do you subtract?

$$4/\overline{24}$$

$$5/\overline{30}$$

$$2/\overline{14}$$

$$3/\overline{18}$$

$$4/\overline{20}$$

$$3/\overline{21}$$

$$12 \div 3 =$$

$$10 \div 5 =$$

$$18 \div 3 =$$

$$28 \div 4 =$$

$$6 \div 3 =$$

Prove that your answers are correct.

<u>6</u> <u>+ 8</u>	<u>4</u> <u>+ 7</u>	<u>9</u> <u>+ 6</u>	<u>6</u> <u>+ 7</u>	<u>4</u> <u>+ 3</u>	<u>8</u> <u>+ 5</u>	<u>9</u> <u>+ 8</u>	<u>5</u> <u>+ 9</u>
------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------

<u>7</u> <u>+ 6</u>	<u>9</u> <u>+ 5</u>	<u>3</u> <u>+ 7</u>	<u>7</u> <u>+ 8</u>	<u>8</u> <u>+ 9</u>	<u>8</u> <u>+ 6</u>	<u>6</u> <u>+ 9</u>	<u>5</u> <u>+ 8</u>
------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------

Check your answers on page 44. How many are correct? _____

<u>18</u> <u>- 9</u>	<u>14</u> <u>- 6</u>	<u>15</u> <u>- 9</u>	<u>13</u> <u>- 5</u>	<u>0</u> <u>- 0</u>	<u>17</u> <u>- 9</u>	<u>14</u> <u>- 9</u>	<u>16</u> <u>- 9</u>
-------------------------	-------------------------	-------------------------	-------------------------	------------------------	-------------------------	-------------------------	-------------------------

<u>15</u> <u>- 8</u>	<u>16</u> <u>- 7</u>	<u>14</u> <u>- 5</u>	<u>17</u> <u>- 8</u>	<u>15</u> <u>- 7</u>	<u>14</u> <u>- 8</u>	<u>16</u> <u>- 8</u>	<u>15</u> <u>- 6</u>
-------------------------	-------------------------	-------------------------	-------------------------	-------------------------	-------------------------	-------------------------	-------------------------

Check your answers on page 95. How many are correct? _____

<u>4</u> <u>× 6</u>	<u>3</u> <u>× 10</u>	<u>3</u> <u>× 4</u>	<u>2</u> <u>× 7</u>	<u>4</u> <u>× 8</u>	<u>4</u> <u>× 10</u>	<u>3</u> <u>× 5</u>	<u>3</u> <u>× 7</u>
------------------------	-------------------------	------------------------	------------------------	------------------------	-------------------------	------------------------	------------------------

<u>4</u> <u>× 3</u>	<u>2</u> <u>× 10</u>	<u>4</u> <u>× 7</u>	<u>3</u> <u>× 8</u>	<u>2</u> <u>× 9</u>	<u>3</u> <u>× 3</u>	<u>3</u> <u>× 6</u>	<u>4</u> <u>× 9</u>
------------------------	-------------------------	------------------------	------------------------	------------------------	------------------------	------------------------	------------------------

Check your answers on page 94. How many are correct? _____

WHAT TIME IS IT?



10 minutes before 2
or 1:50



25 minutes after 3
or 3:25



20 minutes after 4
or 4:20



____ minutes after ____
or ____



____ minutes after ____
or ____



____ minutes after ____
or ____



____ minutes before ____
or ____



____ minutes before ____
or ____



____ minutes before ____
or ____



____ minutes after ____
or ____



____ minutes before ____
or ____



____ minutes after ____
or ____

FOUR KINDS OF PROBLEMS

Do you multiply?

Do you subtract?

Do you divide?

Do you add?

$$\begin{array}{r} 17 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ -8 \\ \hline \end{array}$$

Check your answers on page 95.

Write the ones you need to study.

$$2/\overline{16}$$

$$2/\overline{10}$$

$$4/\overline{16}$$

$$3/\overline{6}$$

$$2/\overline{12}$$

$$3/\overline{12}$$

$$2/\overline{8}$$

$$2/\overline{14}$$

$$3/\overline{15}$$

$$2/\overline{18}$$

Can you prove that your answers are correct?

$$\begin{array}{r} 3 \\ 2 \\ 5 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ 0 \\ 7 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ 1 \\ 0 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ 3 \\ 2 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ 4 \\ 3 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ 0 \\ 1 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ 1 \\ 3 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ 1 \\ 6 \\ +8 \\ \hline \end{array}$$

Ask someone to check this row of answers. How many are correct? _____

$$\begin{array}{r} 9 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ +0 \\ \hline \end{array}$$

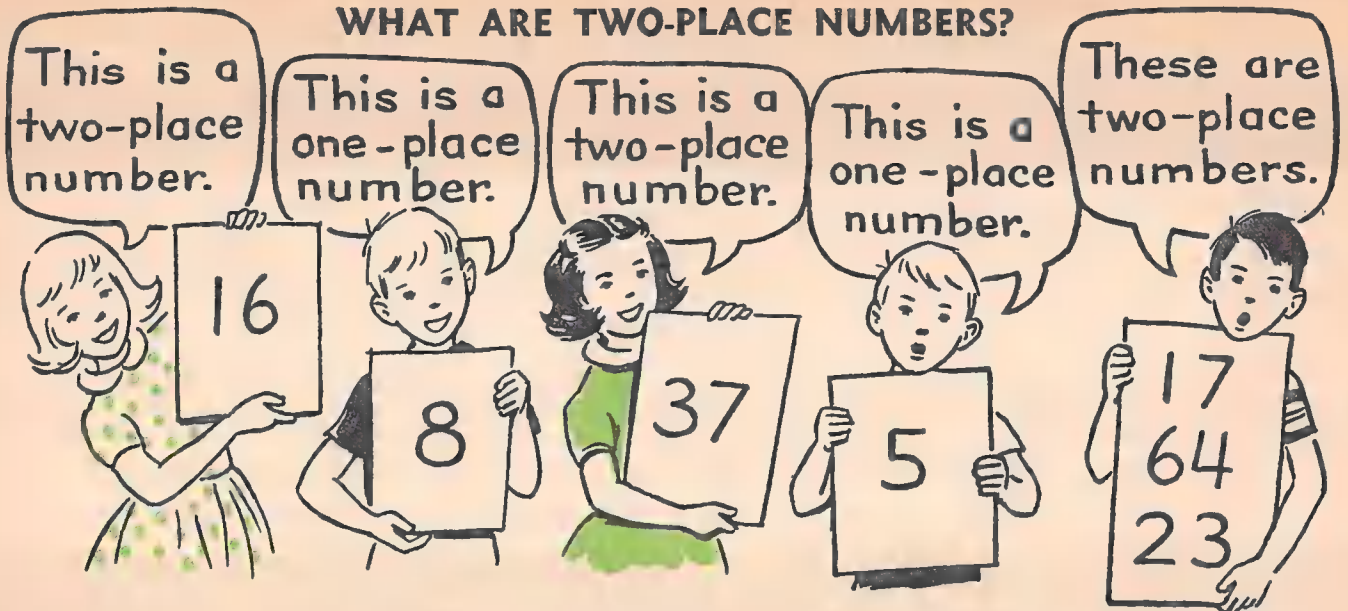
$$\begin{array}{r} 8 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +6 \\ \hline \end{array}$$

Check your answers on page 44. Write the ones you need to study.

WHAT ARE TWO-PLACE NUMBERS?



Two-place numbers have two figures.

Circle all of the two-place numbers.

25 9 5 37

132 61 4 39 21 8 7

Look at the number 16. It is a two-place number.
16 is 10 and 6 more.

16

In a two-place number the figure on the left tells how many tens.
The figure on the right tells how many ones.

Tens Place → 16 ← Ones Place

Look at the number 16 again.
There is a 1 in the tens place.
There is a 6 in the ones place.

Read these to yourself.

37 means 3 tens and 7 ones.

14 means 1 ten and 4 ones.

73 means 7 tens and 3 ones.

57 means 5 tens and 7 ones.

95 means 9 tens and 5 ones.

28 means 2 tens and 8 ones.

31 means 3 tens and 1 one.

69 means 6 tens and 9 ones.

46 means 4 tens and 6 ones.

82 means 8 tens and 2 ones.

Write the correct number in each space.



25 means _____ tens and _____ more.

39 means _____ tens and _____ more.

75 means _____ tens and _____ more.

19 means _____ ten and _____ more.

11 means _____ ten and _____ more.

44 means _____ tens and _____ more.

23 means _____ tens and _____ more.

58 means _____ tens and _____ more.

35 means _____ tens and _____ more.

17 means _____ ten and _____ more.

69 means _____ tens and _____ more.

81 means _____ tens and _____ more.

92 means _____ tens and _____ more.

99 means _____ tens and _____ more.

71 means _____ tens and _____ more.

34 means _____ tens and _____ more.

53 means _____ tens and _____ more.

42 means _____ tens and _____ more.



WHAT NUMBER IS IT?

1 ten and 6 more _____

8 tens and 1 more _____

7 tens and 1 more _____

6 tens and 4 more _____

5 tens and 3 more _____

1 ten and 3 more _____

4 tens and 2 more _____

3 tens and 3 more _____

2 tens and 7 more _____

5 tens and 7 more _____

3 tens and 4 more _____

2 tens and 9 more _____

6 tens and 6 more _____

9 tens and 6 more _____

8 tens and 5 more _____

7 tens and 7 more _____

9 tens and 2 more _____

4 tens and 5 more _____

Are you sure of left and right?



Circle the apple on the right.



Circle the book on the left.



Circle the fish on the right.



Circle the plane on the right.



Circle the bird on the left.



Circle the cap on the left.

Look at this two-place number.
Circle the figure on the right.

75

ADDING TWO-PLACE NUMBERS

There are 14 boys and 13 girls in Tony's room at school. How many children are in his room?

Show me how to add 14 and 13.



How many are 12 and 13 ?



There are 12 girls and 13 boys in Jan's room. How many children in her room?

Let's find out how many children in Tony's room.

Write one number under the other like this:

Add the numbers on the right first.

Then add the numbers on the left.

$$\begin{array}{r} 14 \text{ boys} \\ + 13 \text{ girls} \\ \hline 27 \end{array}$$

How many children in Jan's room?

$$\begin{array}{r} 12 \\ + 13 \\ \hline \end{array}$$

Write the answer.

Are there 25 in Jan's room?

There were 32 people in the park. Soon 27 more came. How many people were in the park then? Write the answer.

$$\begin{array}{r} 32 \\ + 27 \\ \hline \end{array}$$

There are 17 chairs in one room and 12 in another. How many chairs in both rooms? Write the problem and the answer.

There are 35 storybooks in Jan's room and 43 in Tony's room. How many books in both rooms? Write the problem and the answer.

Jim caught 4 grasshoppers. Each of them had 6 legs. How many legs were there all together?

100 A ☆

Row A

In addition the answer is called the sum. Write the sums.

$\begin{array}{r} 42 \\ + 57 \\ \hline 99 \end{array}$	$\begin{array}{r} 32 \\ + 45 \\ \hline 77 \end{array}$	$\begin{array}{r} 27 \\ + 42 \\ \hline 69 \end{array}$	$\begin{array}{r} 37 \\ + 52 \\ \hline 89 \end{array}$	$\begin{array}{r} 17 \\ + 10 \\ \hline 27 \end{array}$	$\begin{array}{r} 16 \\ + 43 \\ \hline 59 \end{array}$
--	--	--	--	--	--

Row B

$\begin{array}{r} 22 \\ + 44 \\ \hline 66 \end{array}$	$\begin{array}{r} 40 \\ + 27 \\ \hline 67 \end{array}$	$\begin{array}{r} 16 \\ + 61 \\ \hline 77 \end{array}$	$\begin{array}{r} 24 \\ + 33 \\ \hline 57 \end{array}$	$\begin{array}{r} 23 \\ + 20 \\ \hline 43 \end{array}$	$\begin{array}{r} 12 \\ + 61 \\ \hline 73 \end{array}$
--	--	--	--	--	--

Row C

$\begin{array}{r} 52 \\ + 46 \\ \hline 98 \end{array}$	$\begin{array}{r} 16 \\ + 52 \\ \hline 68 \end{array}$	$\begin{array}{r} 62 \\ + 30 \\ \hline 92 \end{array}$	$\begin{array}{r} 14 \\ + 14 \\ \hline 28 \end{array}$	$\begin{array}{r} 13 \\ + 24 \\ \hline 37 \end{array}$	$\begin{array}{r} 21 \\ + 67 \\ \hline 88 \end{array}$
--	--	--	--	--	--

Row D

$\begin{array}{r} 22 \\ + 37 \\ \hline 59 \end{array}$	$\begin{array}{r} 34 \\ + 10 \\ \hline 44 \end{array}$	$\begin{array}{r} 15 \\ + 12 \\ \hline 27 \end{array}$	$\begin{array}{r} 38 \\ + 51 \\ \hline 89 \end{array}$	$\begin{array}{r} 42 \\ + 45 \\ \hline 87 \end{array}$	$\begin{array}{r} 51 \\ + 16 \\ \hline 67 \end{array}$
--	--	--	--	--	--

Row E

$\begin{array}{r} 24 \\ + 31 \\ \hline 55 \end{array}$	$\begin{array}{r} 52 \\ + 17 \\ \hline 69 \end{array}$	$\begin{array}{r} 32 \\ + 12 \\ \hline 44 \end{array}$	$\begin{array}{r} 64 \\ + 25 \\ \hline 89 \end{array}$	$\begin{array}{r} 51 \\ + 47 \\ \hline 98 \end{array}$	$\begin{array}{r} 42 \\ + 34 \\ \hline 76 \end{array}$
--	--	--	--	--	--

Row F

$\begin{array}{r} 52 \\ + 16 \\ \hline 68 \end{array}$	$\begin{array}{r} 75 \\ + 23 \\ \hline 98 \end{array}$	$\begin{array}{r} 36 \\ + 42 \\ \hline 78 \end{array}$	$\begin{array}{r} 25 \\ + 33 \\ \hline 58 \end{array}$	$\begin{array}{r} 43 \\ + 26 \\ \hline 69 \end{array}$	$\begin{array}{r} 16 \\ + 83 \\ \hline 99 \end{array}$
--	--	--	--	--	--

Look at page 83. How many of your answers are correct? 36

SUBTRACTING TWO-PLACE NUMBERS

There were 54 people in a meeting. 23 of them went home. How many stayed?

When we take 23 away from 54 there are 31 remaining. In subtraction the answer is called the remainder. It is what remains when something has been taken away.

$$\begin{array}{r} 54 \\ - 23 \\ \hline 31 \end{array}$$

← Start here

Do you know how to prove subtraction problems? Add the remainder to the second number. If the sum of these two is the same as the first number, your answer is correct. When we add 23 to 31 the sum is 54. That proves that the answer to the subtraction problem is correct.

$$\begin{array}{r} 23 \\ + 31 \\ \hline 54 \end{array}$$

Write the remainders. Prove that each answer is correct by adding the remainder to the second number. From now on, do this when you subtract.

$$\begin{array}{r} 63 \\ - 21 \\ \hline 42 \\ 2 \end{array}$$

$$\begin{array}{r} 75 \\ - 33 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 48 \\ - 24 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 68 \\ - 35 \\ \hline 33 \end{array}$$

Can you subtract this way? Try it. Watch for the zeros.

$$\begin{array}{r} 52 \\ - 30 \\ \hline 22 \end{array}$$

$$\begin{array}{r} 33 \\ - 30 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 60 \\ - 40 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 38 \\ - 28 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 88 \\ - 38 \\ \hline 50 \end{array}$$

$$\begin{array}{r} 95 \\ - 65 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 73 \\ - 40 \\ \hline 33 \end{array}$$

$$\begin{array}{r} 90 \\ - 50 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 37 \\ - 30 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 44 \\ - 14 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 63 \\ - 61 \\ \hline 2 \end{array}$$

$$\begin{array}{r} 77 \\ - 57 \\ \hline 20 \end{array}$$

Name _____

Nancy Richards

Find the remainders. Prove that your answers are correct.

$$\begin{array}{r} 84 \\ -13 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ -10 \\ \hline \end{array}$$

$$\begin{array}{r} 77 \\ -37 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ -12 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ -28 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ -16 \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ -23 \\ \hline \end{array}$$

$$\begin{array}{r} 90 \\ -20 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ -24 \\ \hline \end{array}$$

$$\begin{array}{r} 91 \\ -11 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ -16 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ -10 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ -24 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ -13 \\ \hline \end{array}$$

$$\begin{array}{r} 95 \\ -35 \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ -18 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ -11 \\ \hline \end{array}$$

$$\begin{array}{r} 85 \\ -33 \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ -21 \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ -60 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ -22 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ -12 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ -40 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ -13 \\ \hline \end{array}$$

More About Odd and Even Numbers

On page 24 you learned that 1, 3, 5, 7, 9 are odd numbers. You learned that 2, 4, 6, 8, 10 are even numbers. In a two-place number, the place at the right tells you whether the number is odd or even.

76 is an even number.

59 is an odd number.

100 is an even number.

17 is an odd number.

123 is an odd number.

312 is an even number.

Is 83 odd or even? _____

Is 300 odd or even? _____

Is 538 odd or even? _____

Is 32 odd or even? _____

Is 41 odd or even? _____

Is 400 odd or even? _____

What do you remember about Roman numbers?

Write a Roman number under each of these.

1

2

3

4

5

6

Now look at page 53. Are your Roman numbers correct?

THREE-PLACE NUMBERS

Read these numbers aloud: 354 142 261 538 852 254

Each of these is a three-place number. Each has three figures.

Circle each of the three-place numbers.

24 9 261 100 99 16
435 283 38 7 33 247

Look at this number:

253

It is a three-place number.

The place at the right is for ones.

The second place is for tens.

The third place is for hundreds.

Look at 253 again. There is a 3 in the ones place.

There is a 5 in the tens place.

There is a 2 in the hundreds place.

253 means 200
and 53 more.



601 means
600 and
no tens
and 1 one.

Read these aloud:

234 means 2 hundreds and 3 tens and 4 ones.

452 means 4 hundreds and 5 tens and 2 ones.

333 means 3 hundreds and 3 tens and 3 ones.

261 means 2 hundreds and 6 tens and 1 one.

147 means 1 hundred and 4 tens and 7 ones.

575 means 5 hundreds and 7 tens and 5 ones.

147 means 1 hundred and 4 tens and 7 ones.

600 means 6 hundreds and no tens and no ones.

575 means 5 hundreds and 7 tens and 5 ones.

Answers to Problems on Page 80

Row A—99	77	69	89	27	59
Row B—66	67	77	57	43	73
Row C—98	68	92	28	37	88
Row D—59	44	27	89	87	67
Row E—55	69	44	89	98	76
Row F—68	98	78	58	69	99



Write the correct number in each space.

254 means _____ hundreds, _____ tens, and _____ ones.

342 means _____ hundreds, _____ tens, and _____ ones.

167 means _____ hundred, _____ tens, and _____ ones.

285 means _____ hundreds, _____ tens, and _____ ones.

732 means _____ hundreds, _____ tens, and _____ ones.

463 means _____ hundreds, _____ tens, and _____ ones.

523 means _____ hundreds, _____ tens, and _____ ones.

422 means _____ hundreds, _____ tens, and _____ ones.

What number is it?

2 hundreds and 4 tens and 7 ones _____

4 hundreds and 7 tens and 3 ones _____

3 hundreds and 1 ten and 6 ones _____

5 hundreds and 2 tens and 4 ones _____

1 hundred and 5 tens and 7 ones _____

6 hundreds and 2 tens and 4 ones _____

2 hundreds and 7 tens and 8 ones _____

5 hundreds and 6 tens and 4 ones _____

4 hundreds and 6 tens and 5 ones _____

8 hundreds and 3 tens and 2 ones _____

7 hundreds and 1 ten and no ones _____

1 hundred and 4 tens and no ones _____

5 hundreds and no tens and no ones _____

2 hundreds and 8 tens and 4 ones _____

ADDING THREE-PLACE NUMBERS

There are 256 children in Dick's school and 133 children in Terry's school. How many children in both schools?

Bob and Jill helped Mr. Green pick apples. Jill picked 276 apples and Bob picked 321. How many apples did they pick all together? _____

Mr. Green had 250 white chickens and 145 gray chickens. How many chickens did he have all together? _____

Miss Hill had 532 toys in her store. She ordered 200 more. How many toys did she have then? _____

Start here

$$\begin{array}{r} 256 \\ + 133 \\ \hline 389 \end{array}$$



Write the sums.

Row A

$$\begin{array}{r} 475 \\ + 212 \\ \hline \end{array}$$

687

$$\begin{array}{r} 625 \\ + 304 \\ \hline \end{array}$$

929
929

$$\begin{array}{r} 605 \\ + 172 \\ \hline \end{array}$$

$$\begin{array}{r} 516 \\ + 272 \\ \hline \end{array}$$

$$\begin{array}{r} 231 \\ + 342 \\ \hline \end{array}$$

Row B

$$\begin{array}{r} 226 \\ + 571 \\ \hline \end{array}$$

$$\begin{array}{r} 470 \\ + 217 \\ \hline \end{array}$$

$$\begin{array}{r} 470 \\ + 320 \\ \hline \end{array}$$

$$\begin{array}{r} 450 \\ + 123 \\ \hline \end{array}$$

$$\begin{array}{r} 731 \\ + 262 \\ \hline \end{array}$$

Row C

$$\begin{array}{r} 620 \\ + 143 \\ \hline \end{array}$$

$$\begin{array}{r} 517 \\ + 342 \\ \hline \end{array}$$

$$\begin{array}{r} 671 \\ + 308 \\ \hline \end{array}$$

$$\begin{array}{r} 560 \\ + 417 \\ \hline \end{array}$$

$$\begin{array}{r} 608 \\ + 171 \\ \hline \end{array}$$

Row D

$$\begin{array}{r} 561 \\ + 328 \\ \hline \end{array}$$

$$\begin{array}{r} 631 \\ + 247 \\ \hline \end{array}$$

$$\begin{array}{r} 482 \\ + 307 \\ \hline \end{array}$$

$$\begin{array}{r} 524 \\ + 364 \\ \hline \end{array}$$

$$\begin{array}{r} 451 \\ + 346 \\ \hline \end{array}$$

Look at page 88. How many of your answers are correct?

Name _____ Page 85

SUBTRACTING THREE-PLACE NUMBERS

There are 256 children in Dick's school and 133 in Terry's school. How many more children are there in Dick's school than there are in Terry's school?

$$\begin{array}{r} 256 \\ -133 \\ \hline 123 \end{array} \quad \begin{array}{r} 133 \\ +123 \\ \hline 256 \end{array}$$

The Smith family went on a long trip. They drove 347 miles the first day and 468 miles the second day. How many more miles did they drive the second day? Write the answer.

$$\begin{array}{r} 468 \\ -347 \\ \hline 121 \end{array}$$

A farmer had 450 acres of wheat and 340 acres of corn. How many more acres of wheat than corn? Write the answer.

$$\begin{array}{r} 450 \\ -340 \\ \hline \end{array}$$

It is 352 miles from Ted's home to his grandmother's home. His aunt lives 230 miles from his home. How much farther away does his grandmother live? Write the answer.

$$\begin{array}{r} 352 \\ -230 \\ \hline \end{array}$$

Write the remainders, then prove your answers.

$$\begin{array}{r} 671 \\ -240 \\ \hline \end{array}$$

$$\begin{array}{r} 886 \\ -172 \\ \hline \end{array}$$

$$\begin{array}{r} 767 \\ -133 \\ \hline \end{array}$$

$$\begin{array}{r} 569 \\ -204 \\ \hline \end{array}$$

$$\begin{array}{r} 748 \\ -125 \\ \hline \end{array}$$

$$\begin{array}{r} 864 \\ -123 \\ \hline \end{array}$$

$$\begin{array}{r} 286 \\ -231 \\ \hline \end{array}$$

$$\begin{array}{r} 974 \\ -321 \\ \hline \end{array}$$

$$\begin{array}{r} 875 \\ -401 \\ \hline \end{array}$$

$$\begin{array}{r} 648 \\ -237 \\ \hline \end{array}$$

$$\begin{array}{r} 699 \\ -568 \\ \hline \end{array}$$

$$\begin{array}{r} 984 \\ -300 \\ \hline \end{array}$$

$$\begin{array}{r} 895 \\ -621 \\ \hline \end{array}$$

$$\begin{array}{r} 809 \\ -207 \\ \hline \end{array}$$

$$\begin{array}{r} 568 \\ -141 \\ \hline \end{array}$$

$$\begin{array}{r} 843 \\ -201 \\ \hline \end{array}$$

$$\begin{array}{r} 775 \\ -175 \\ \hline \end{array}$$

$$\begin{array}{r} 576 \\ -304 \\ \hline \end{array}$$

$$\begin{array}{r} 951 \\ -810 \\ \hline \end{array}$$

$$\begin{array}{r} 379 \\ -252 \\ \hline \end{array}$$

MULTIPLYING TWO-AND-THREE-PLACE NUMBERS

Watch out for the zeros.

Row A

$$\begin{array}{r} 43 \\ \times 3 \\ \hline 129 \end{array}$$

$$\begin{array}{r} 24 \\ \times 2 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 30 \\ \times 3 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 73 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ \times 2 \\ \hline \end{array}$$

Row B

$$\begin{array}{r} 44 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 72 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \\ \times 5 \\ \hline \end{array}$$

Row C

$$\begin{array}{r} 71 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \\ \times 4 \\ \hline \end{array}$$

Row D

$$\begin{array}{r} 33 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 64 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 70 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 82 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 81 \\ \times 5 \\ \hline \end{array}$$

Row E

$$\begin{array}{r} 231 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 422 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 330 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 400 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 101 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 200 \\ \times 4 \\ \hline \end{array}$$

Row F

$$\begin{array}{r} 320 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 200 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 313 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 314 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 304 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 411 \\ \times 2 \\ \hline \end{array}$$

Row G

$$\begin{array}{r} 301 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 420 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 213 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 312 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 123 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 410 \\ \times 2 \\ \hline \end{array}$$

Look at page 89. How many of your answers are correct?

DIVIDING TWO-AND-THREE-PLACE NUMBERS

Mary Ann paid 69¢ for ribbon. The ribbon was 3¢ a yard. How many yards did she buy? There are two 3's in 6. There are three 3's in 9. The answer is 23. Prove this. Multiply the answer by the divisor.

$$\begin{array}{r} 23 \\ 3 \overline{) 69} \\ \underline{69} \\ 0 \end{array}$$

$$\begin{array}{r} 23 \\ \times 3 \\ \hline 69 \end{array}$$

Mr. Green was going to a city that was 640 miles away. If he drove it in 2 days, how many miles would he drive each day? Is this answer correct? Prove it.

$$\begin{array}{r} 320 \\ 2 \overline{) 640} \\ \underline{640} \\ 0 \end{array}$$

David divided 48 pieces of candy among 4 children. How many pieces did each child have? Write the problem and prove the answer.

Sally's mother planted 88 tulip bulbs in 4 even rows. How many bulbs were there in each row? Write the problem and prove the answer.

The children were getting ready for a play at school. They placed 55 chairs in 5 even rows. How many chairs were in each row? Write the problem and prove the answer.

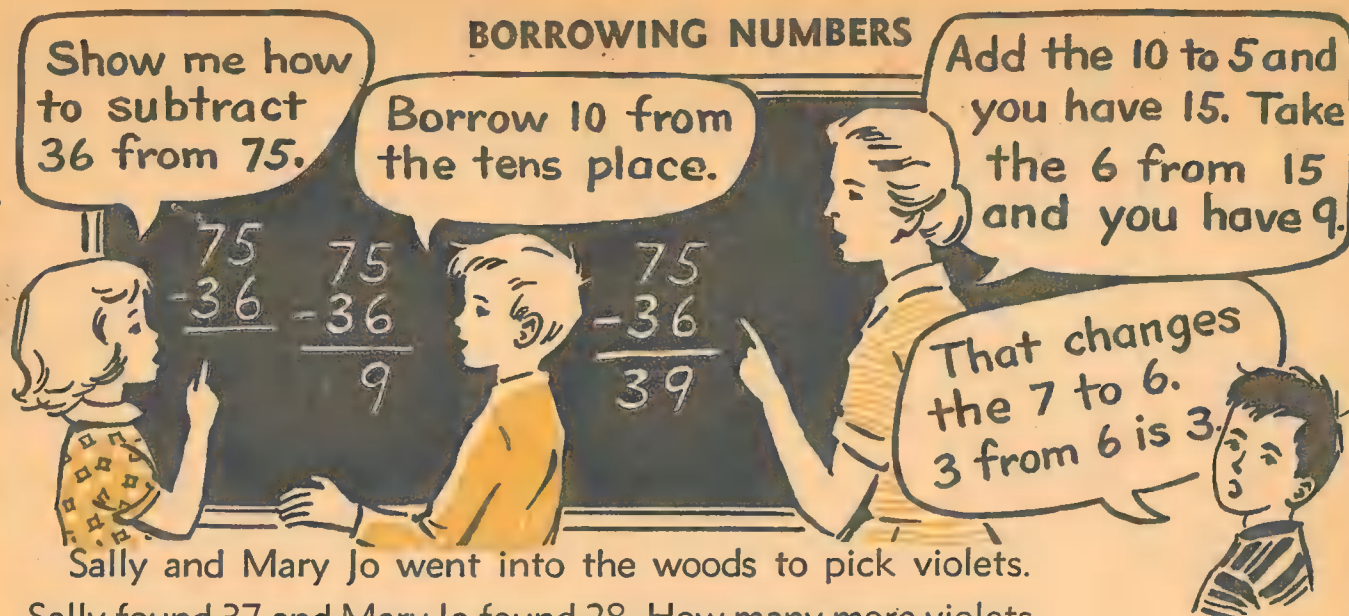
Farmer Carl had 396 pounds of potatoes. He wanted to divide them into 3 bags. How many pounds would he have in each bag? Write the problem and prove the answer.

Farmer Carl had 448 chickens. He had 4 chicken houses. How many chickens did he put into each house? Write the problem and prove the answer.

Answers to Problems on Page 85

Row A—687	929	777	788	573
Row B—797	687	790	573	993
Row C—763	859	979	977	779
Row D—889	878	789	888	797

BORROWING NUMBERS



Sally and Mary Jo went into the woods to pick violets. Sally found 37 and Mary Jo found 28. How many more violets did Sally find than Mary Jo?

Borrow 10 from the tens place. Add it to the 7 and you have 17. Take 8 away from 17 and you have 9 left.

When you borrowed the 10, the 3 became 2. Take 2 away from 2 and there is nothing left. The answer is 9 and nothing is written in the tens place.

Prove the answer by adding like this:

Practice borrowing numbers.

$$\begin{array}{r} 45 \\ - 26 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 52 \\ - 35 \\ \hline \end{array}$$

$$\begin{array}{r} 66 \\ - 38 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ - 28 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ - 25 \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ - 56 \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ - 55 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ - 36 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ - 42 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ - 19 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ - 65 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ - 26 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ - 28 \\ \hline 9 \end{array}$$

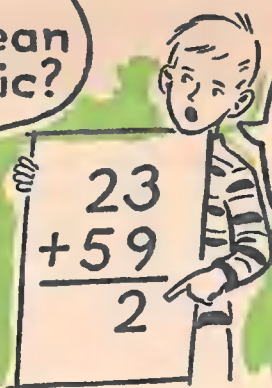
$$\begin{array}{r} 28 \\ + 9 \\ \hline 37 \end{array}$$

Answers to Problems on Page 87

Row A—129	48	90	219	80	68
Row B— 88	186	144	156	123	105
Row C—355	250	99	84	255	128
Row D— 66	128	350	328	100	405
Row E—693	844	990	800	505	800
Row F—960	600	939	628	608	822
Row G—903	840	639	624	369	820

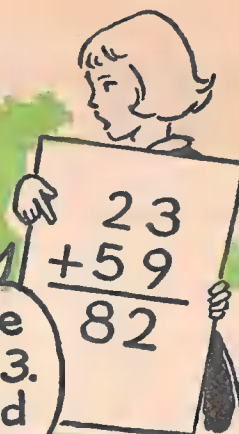
What does carrying mean in arithmetic?

CARRYING NUMBERS



$9 + 3 = 12$
Write the 2 and carry the 1 over to the tens place.

Add the 1 to the 2. That makes 3. Add 3 and 5 and you have 8.



Mr. Moore sold 27 tablets the first day of school and 15 the next day. How many did he sell both days?

$$\begin{array}{r} 27 \\ + 15 \\ \hline 42 \end{array}$$

Row A

Write the sums. Practice carrying numbers.

$$\begin{array}{r} 46 \\ + 27 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 58 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ + 23 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ + 54 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ + 32 \\ \hline \end{array}$$

Row B

$$\begin{array}{r} 18 \\ + 24 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ + 53 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 27 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 29 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ + 39 \\ \hline \end{array}$$

Row C

$$\begin{array}{r} 35 \\ + 46 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 71 \\ + 19 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ + 26 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ + 44 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ + 66 \\ \hline \end{array}$$

Row D

$$\begin{array}{r} 16 \\ + 29 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ + 35 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ + 18 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ + 22 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ + 54 \\ \hline \end{array}$$

$$\begin{array}{r} 57 \\ + 33 \\ \hline \end{array}$$

Row E

$$\begin{array}{r} 18 \\ + 76 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ + 63 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 19 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ + 15 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ + 25 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ + 26 \\ \hline \end{array}$$

Look at page 92. How many of your answers are correct? _____

FUN WITH MEASURING



Different things are measured in different ways.

Mike plays football. He drinks a quart of milk each day. His sister Carol drinks a pint of milk each day.

There are two pints in a quart.

Does Carol drink as much milk as Mike? _____

Does Mike drink twice as much as Carol? _____



There are four quarts in a gallon.

Mike drinks a gallon in _____ days.

Carol drinks a quart in _____ days.

Sometimes dry things are measured by quarts and pints.

Mrs. Gray bought a quart of berries. Mrs. Smith bought a pint of berries. Which woman bought more? _____



Some things are measured by dozens.

A dozen of anything is 12.

How many are a half dozen? _____

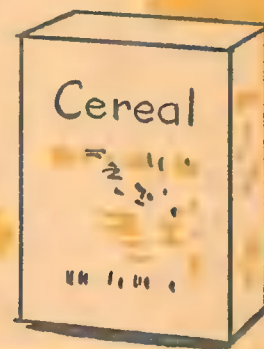
To find half of any number we divide by 2.

$$2 \overline{)12}$$

Some things are measured by pounds and ounces.

A pound is 16 ounces.

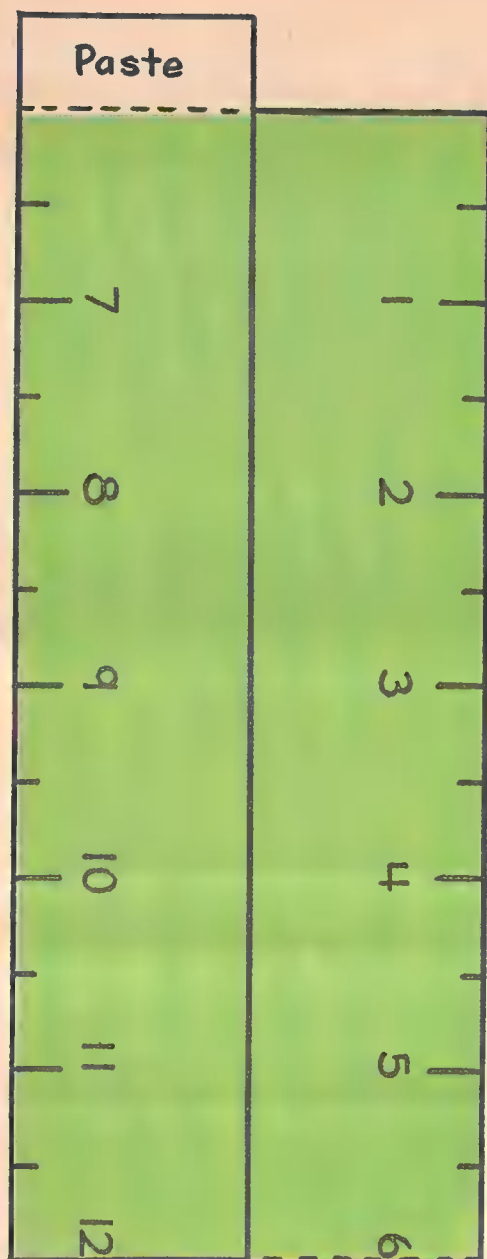
Pam bought a pound of butter and a box of cereal. The cereal weighed 12 ounces but it was much bigger in size than the 16 ounces of butter.



Look at some of the boxes and packages in your kitchen. Most of them tell how much the contents weigh. If the contents are less than 16 ounces, it is less than a pound.

Make a list of ten things. Write after each one how much the contents weighs. Circle all of those that weigh a pound or more.

How many pounds do you weigh? _____



Make a ruler and have fun measuring things.
Cut out the two parts of the ruler. Paste the parts together and you will have a twelve-inch ruler. We call this a foot ruler. A foot ruler is twelve inches long.

Ted made a house for his rabbit. It was two feet long and three feet wide. Place your ruler on the floor and find out how big the rabbit house was.

Jan's new book is eight inches long and six inches wide. Use your ruler and find out how big Jan's book is.

_____ inches long.

_____ inches long.

_____ inches long.

_____ inches long.

A yardstick is three times as long as a foot ruler.

There are 36 inches in one yard.

Use your foot ruler and measure one yard on the floor.

$$\begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array}$$

Answers to Problems on page 90

Row A—73	66	70	61	71	51
Row B—42	72	41	40	40	93
Row C—81	73	90	82	82	93
Row D—45	70	33	41	81	90
Row E—94	92	33	30	50	45

TIME IS MEASURED IN SEVERAL WAYS

Clocks measure time with minutes and hours.

How many minutes in one hour? _____

How many hours in a day? _____

How many hours in a day and a night? _____



Calendars measure time with days and weeks and months.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Read the names of the months.

1. January
2. February
3. March
4. April
5. May
6. June
7. July
8. August
9. September
10. October
11. November
12. December

There are seven days in a week.

We think of a month as four weeks.

How many months in a year? _____

Some months have more days than others.

Here is a verse for you to learn:

Thirty days has September,
 April, June, and November.
 All the rest have thirty-one,
 Except February. It has twenty-eight
 Until Leap Year gives it twenty-nine.

Do you have a calendar? _____

What day is it? _____

What month is it? _____

What year is it? _____

When is your birthday? _____

In what year were you born? _____

SIXTY MULTIPLICATION FACTS

$\begin{array}{r} 1 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 2 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 3 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 4 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 5 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 6 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 7 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 8 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 9 \\ \times 0 \\ \hline 0 \end{array}$	$\begin{array}{r} 0 \\ \times 0 \\ \hline 0 \end{array}$
$\begin{array}{r} 1 \\ \times 1 \\ \hline 1 \end{array}$	$\begin{array}{r} 2 \\ \times 1 \\ \hline 2 \end{array}$	$\begin{array}{r} 3 \\ \times 1 \\ \hline 3 \end{array}$	$\begin{array}{r} 4 \\ \times 1 \\ \hline 4 \end{array}$	$\begin{array}{r} 5 \\ \times 1 \\ \hline 5 \end{array}$	$\begin{array}{r} 6 \\ \times 1 \\ \hline 6 \end{array}$	$\begin{array}{r} 7 \\ \times 1 \\ \hline 7 \end{array}$	$\begin{array}{r} 8 \\ \times 1 \\ \hline 8 \end{array}$	$\begin{array}{r} 9 \\ \times 1 \\ \hline 9 \end{array}$	$\begin{array}{r} 10 \\ \times 1 \\ \hline 10 \end{array}$
$\begin{array}{r} 1 \\ \times 2 \\ \hline 2 \end{array}$	$\begin{array}{r} 2 \\ \times 2 \\ \hline 4 \end{array}$	$\begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array}$	$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array}$	$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline 12 \end{array}$	$\begin{array}{r} 7 \\ \times 2 \\ \hline 14 \end{array}$	$\begin{array}{r} 8 \\ \times 2 \\ \hline 16 \end{array}$	$\begin{array}{r} 9 \\ \times 2 \\ \hline 18 \end{array}$	$\begin{array}{r} 10 \\ \times 2 \\ \hline 20 \end{array}$
$\begin{array}{r} 1 \\ \times 3 \\ \hline 3 \end{array}$	$\begin{array}{r} 2 \\ \times 3 \\ \hline 6 \end{array}$	$\begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array}$	$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$	$\begin{array}{r} 5 \\ \times 3 \\ \hline 15 \end{array}$	$\begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array}$	$\begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array}$	$\begin{array}{r} 8 \\ \times 3 \\ \hline 24 \end{array}$	$\begin{array}{r} 9 \\ \times 3 \\ \hline 27 \end{array}$	$\begin{array}{r} 10 \\ \times 3 \\ \hline 30 \end{array}$
$\begin{array}{r} 1 \\ \times 4 \\ \hline 4 \end{array}$	$\begin{array}{r} 2 \\ \times 4 \\ \hline 8 \end{array}$	$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$	$\begin{array}{r} 4 \\ \times 4 \\ \hline 16 \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline 24 \end{array}$	$\begin{array}{r} 7 \\ \times 4 \\ \hline 28 \end{array}$	$\begin{array}{r} 8 \\ \times 4 \\ \hline 32 \end{array}$	$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$	$\begin{array}{r} 10 \\ \times 4 \\ \hline 40 \end{array}$
$\begin{array}{r} 1 \\ \times 5 \\ \hline 5 \end{array}$	$\begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array}$	$\begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline 20 \end{array}$	$\begin{array}{r} 5 \\ \times 5 \\ \hline 25 \end{array}$	$\begin{array}{r} 6 \\ \times 5 \\ \hline 30 \end{array}$	$\begin{array}{r} 7 \\ \times 5 \\ \hline 35 \end{array}$	$\begin{array}{r} 8 \\ \times 5 \\ \hline 40 \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline 45 \end{array}$	$\begin{array}{r} 10 \\ \times 5 \\ \hline 50 \end{array}$

Answers to Problems on Page 96

B— 82	79	82	93	79	82	81
C—550	369	848	628	939	844	
E—835	862	329	570	581	564	
521	866	740	753	589	931	

What do you remember about measuring?

- | | |
|------------------------------------|------------------------------------|
| How many pints in a quart? _____ | How many ounces in a pound? _____ |
| How many quarts in a gallon? _____ | How many minutes in an hour? _____ |
| How many inches in a foot? _____ | How many hours in a day? _____ |
| How many inches in a yard? _____ | How many days in a week? _____ |
| How many feet in a yard? _____ | How many weeks in a month? _____ |
| How many in a dozen? _____ | How many months in a year? _____ |

ONE HUNDRED SUBTRACTION FACTS

1	2	3	4	5	6	7	8	9	0
-0	-0	-0	-0	-0	-0	-0	-0	-0	-0
1	2	3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8	9	10
-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
0	1	2	3	4	5	6	7	8	9
2	3	4	5	6	7	8	9	10	11
-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
0	1	2	3	4	5	6	7	8	9
3	4	5	6	7	8	9	10	11	12
-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
0	1	2	3	4	5	6	7	8	9
4	5	6	7	8	9	10	11	12	13
-4	-4	-4	-4	-4	-4	-4	-4	-4	-4
0	1	2	3	4	5	6	7	8	9
5	6	7	8	9	10	11	12	13	14
-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
0	1	2	3	4	5	6	7	8	9
6	7	8	9	10	11	12	13	14	15
-6	-6	-6	-6	-6	-6	-6	-6	-6	-6
0	1	2	3	4	5	6	7	8	9
7	8	9	10	11	12	13	14	15	16
-7	-7	-7	-7	-7	-7	-7	-7	-7	-7
0	1	2	3	4	5	6	7	8	9
8	9	10	11	12	13	14	15	16	17
-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
0	1	2	3	4	5	6	7	8	9
9	10	11	12	13	14	15	16	17	18
-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
0	1	2	3	4	5	6	7	8	9

FIVE KINDS OF PROBLEMS

A—Find the remainders and prove the answers.

$$\begin{array}{r} 25 \\ - 16 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ - 22 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ - 26 \\ \hline \end{array}$$

$$\begin{array}{r} 57 \\ - 19 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ - 16 \\ \hline \end{array}$$

$$\begin{array}{r} 58 \\ - 34 \\ \hline \end{array}$$

$$\begin{array}{r} 98 \\ - 26 \\ \hline \end{array}$$

$$\begin{array}{r} 235 \\ - 16 \\ \hline \end{array}$$

$$\begin{array}{r} 195 \\ - 170 \\ \hline \end{array}$$

$$\begin{array}{r} 354 \\ - 26 \\ \hline \end{array}$$

$$\begin{array}{r} 500 \\ - 200 \\ \hline \end{array}$$

$$\begin{array}{r} 433 \\ - 118 \\ \hline \end{array}$$

$$\begin{array}{r} 350 \\ - 250 \\ \hline \end{array}$$

B—Find the sums.

$$\begin{array}{r} 16 \\ 31 \\ 13 \\ + 22 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ 14 \\ 10 \\ + 32 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \\ 11 \\ 35 \\ + 20 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \\ 12 \\ 14 \\ + 41 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ 31 \\ 10 \\ + 27 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ 8 \\ 10 \\ + 52 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ 10 \\ 6 \\ + 12 \\ \hline \end{array}$$

C—Multiply

$$\begin{array}{r} 110 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 123 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 212 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 314 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 313 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 211 \\ \times 4 \\ \hline \end{array}$$

D—Divide and prove your answers.

$$3 \overline{)639}$$

$$2 \overline{)824}$$

$$4 \overline{)448}$$

$$2 \overline{)628}$$

$$3 \overline{)966}$$

E—Find the sums.

$$\begin{array}{r} 621 \\ + 214 \\ \hline \end{array}$$

$$\begin{array}{r} 520 \\ + 342 \\ \hline \end{array}$$

$$\begin{array}{r} 126 \\ + 203 \\ \hline \end{array}$$

$$\begin{array}{r} 321 \\ + 249 \\ \hline \end{array}$$

$$\begin{array}{r} 125 \\ + 456 \\ \hline \end{array}$$

$$\begin{array}{r} 307 \\ + 257 \\ \hline \end{array}$$

$$\begin{array}{r} 218 \\ + 303 \\ \hline \end{array}$$

$$\begin{array}{r} 225 \\ + 641 \\ \hline \end{array}$$

$$\begin{array}{r} 226 \\ + 514 \\ \hline \end{array}$$

$$\begin{array}{r} 426 \\ + 327 \\ \hline \end{array}$$

$$\begin{array}{r} 256 \\ + 333 \\ \hline \end{array}$$

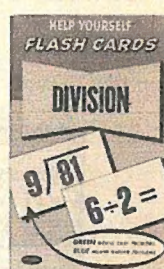
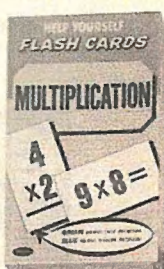
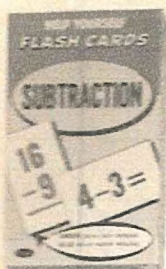
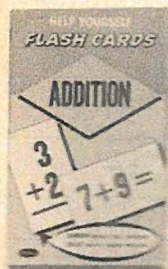
$$\begin{array}{r} 318 \\ + 613 \\ \hline \end{array}$$

The answers to B, C, and E are on page 94.

HELP YOURSELF EDUCATIONAL MATERIALS FOR HOME AND SCHOOL

*Help a Child
to Help Himself*

ARITHMETIC FLASH CARDS



WITH SPECIAL FEATURES

- Divided into Easy and Difficult Combinations
- Printed with Eye-Saving Ink
- Presented in both Horizontal and Vertical Forms
- Problem with Answer on Reverse Side of Card

\$1.00 Per Set

Set No. 1—ADDITION

Set No. 2—SUBTRACTION

Set No. 3—MULTIPLICATION

Set No. 4—DIVISION

THE BIG HELP YOURSELF BOOK

*Something New
and Different
in a Workbook*

192 Pages—89¢

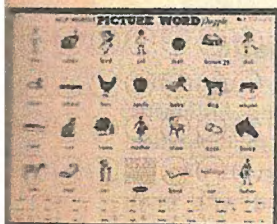


Starts simply and increases in difficulty. Reading, arithmetic, spelling, writing, phonics grow out of interesting stories.

PICTURE-WORD FRAME TRAY PUZZLES

For Beginning Readers

BRIGHT COLORS • STURDY—29¢ EACH



**No. 1
Simple Nouns**



**No. 2
Adjectives**



**No. 3
Verbs**



**No. 4
More Nouns**

IT'S FUN TO LEARN!

Whitman

HELP YOURSELF BOOKS

For home and school • can be used with very little adult help • will help a child to build better work habits • scientifically planned • controlled vocabulary based on standard word lists • meaningful illustrations • easy-to-read type • perforated pages.



Simple Things to Learn About Science

Teaches basic science facts—pictures, stories, simple experiments.



Read, Color, Play

Planned so that a child who is ready to read can teach himself with very little adult help.



Fun With Words

Is a child's first phonics book. Letter sounds are taught with games and pictures.



Fun With Writing

Gives a child practice in manuscript-style writing used today in primary grades.



Fun With Phonics

Helps a child to read by teaching about vowels, consonants, word endings, syllables, etc.



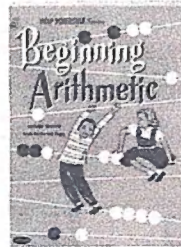
Spell and Play

Is planned as a fun and practice book for the child who is ready to learn to spell.



Count, Color, Play

Teaches a beginner to count objects. Gives practice in reading and writing numbers.



Beginning Arithmetic

Introduces addition, subtraction, telling time, and many other useful number facts.



More Reading

Can follow Read, Color, Play. The story material, variety of word games, and the many drawings make it an ideal book for a child who has had only a few months of reading experience.



More Spelling

Proves that spelling can be useful and fun. Lessons are planned around stories and interesting facts. Much practice is given in writing and spelling words a child needs to know.



More Arithmetic

Planned to follow Count, Color, Play and Beginning Arithmetic, this book teaches multiplication, division, borrowing, carrying, etc. in easy stages and with much practice.